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U. S. DEPARTMENT OF THE INTERIOR
PROTOTYPE OIL SHALE LEASING PROGRAM

OIL SHALE TRACT C-b
ENVIRONMENTAL MONITORING REPORT
(June 1983 through November 1983)

Submitted to:

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By:

CATHEDRAL BLUFFS SHALE OIL COMPANY

TENNECO SHALE OIL COMPANY
OCCIDENTAL OIL SHALE, INC.

January 15, 1984

SHOUT
SHARE
IT

VOLUME I

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INTRODUCTION

Regular environmental reporting for Oil Shale Tract C-b during the interim monitoring period consists of six-month data reports submitted February 15, 1983, July 15, 1983, and January 15, 1984. Limited data analyses are included in the February 1983 and January 15, 1984 reports.

The Interim Monitoring Program was initiated in March 1982. The data reported here fulfill the environmental monitoring requirements specified for the interim monitoring period by the OSPO. Data are reported for the period of June 1983 to November 1983. Data stored in the computerized data base and summary tables presented in this report are correct to the best of our knowledge. Any errors found in previously reported data appear in the Data Corrections section.

Data not previously reported for dates prior to this report period are presented in the Supplemental Data Sections for meteorology, air quality, hydrology and lab analyses.

DEVELOPMENT MONITORING PROGRAMS

1.0 Environmental Monitoring Program

The Development Monitoring Program was discontinued in March 1982 and replaced with an Interim Monitoring Program during a period of reduced site activity at the C-b Tract. Each section will specify changes made to the monitoring program.

TRACT PHOTOGRAPHY

1.1 Tract Photography

Surface and aerial photography programs were discontinued during the interim monitoring period. They will be reinitiated when Tract activities start up.

HYDROLOGY &
WATER QUALITY

1.2 Hydrology and Water Quality

To assist in interpretation of hydrologic and water quality data, the reader must understand that two items in particular may affect monitoring program results: intentional flooding of the V/E shaft and water management practices. The V/E shaft was allowed to flood in September 1981; water levels have reached the equilibrium level shown in Figure 1.2.1.6-1. Direct discharge from Ponds A/B into Piceance Creek via Little Gardenhire Gulch was utilized to dispose of excess mine water from the Production and Service Shafts.

Hydrologic and water quality monitoring frequency and laboratory analysis requirements vary by type and location of sample collection station. The requirements from government agencies also vary regarding purpose of monitoring. Tract C-b monitoring requirements have been detailed in these documents as follows:

IMP - Interim Monitoring Program prepared for the Oil Shale Project Office (OSPO).

WAP - Water Augmentation Plan prepared for the State of Colorado Water Court, Division 5.

NPDES - National Pollutant Discharge Elimination System monthly report prepared for the State of Colorado Water Quality Control Division.

Data reported consist of waters sampled during June through November 1983; these data are presented in tabular and plot form. Levels and Flows Section 1.2.1 contains flows, levels and field measurements of temperature, pH, specific conductance and field fluoride within each sub-section. Table 1.2-1 contains water monitoring requirements by station designation for sample frequencies of levels or flows and water quality. This table replaced Exhibit B, which displayed monitoring requirement for the WAP during development on C-b Tract. Within each sub-section of Water Quality Section 1.2.2, the required frequency is explained and parameters listed for analyses during the Interim Monitoring Program (IMP). Table 1.2-2 is an index of deep wells sampled in and around C-b Tract with lists of page numbers locating levels data, time series plots of levels and water quality for each well by aquifer or zone and location.

Exhibit A (map) presented in jacket Figure 1.2-1 provides location of off-tract sampling sites. Maps are included in each water type sub-section for locating on or near Tract sampling sites. Station coordinates and four-digit computer codes for collection stations sampled periodically since baseline are presented in Section 3.0, Data Automation.

Water quality files in the RAMIS data base system, are continuing extensive quality assurance review with updates being made to erroneous values, data stored under wrong location code, and field data that were not input to these files. This procedure is a means of assuring all data stored in RAMIS files are correct to the best of our knowledge. Corrected data tables and new statistics (maximum, minimum, mean and standard deviation values) of the water analysis suite will be presented in the Assurance Section 1.2.4, Water Quality.

Geothermal Surveys, Inc. (GSI), South Pasadena, California, published two reports:

1) Progress in Installation of a Ground Water Monitoring System in the Vicinity of Spring 102, Piceance Creek Valley, Rio Blanco County, Colorado, May 31, 1983.

2) Interpretations and Conclusions from Downhole Temperature Logs of Selected Wells on Tract C-b, Piceance Basin, Colorado September 1, 1983.

These reports are presented at the end of this Hydrology Volume in Special Reports Section 1.2.4.

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TABLE 1.2-1
Interim Monitoring Program
Water Monitoring Requirements by Designation
Observation Wells

Computer Code	Designation	Owner of Well	Formation	Frequency Levels	Frequency Water Quality	Measured By
WA01	A-1	TOSCO	Alluvium	M	S/F	A
WA02	A-2	TOSCO	"	M	S/F	A
WA03	A-3	CB	"	M	S/F	A
WA04	A-4	CB	"	Dry	S/F	A
WA05	A-5	CB	"	M	S/F	A
WA55	A-5A	CB	"	M	S/F	A
WA56	A-5B	CB	"	M	S/F	A
WA06	A-6	TOSCO	"	M	S/F	A
WA07	A-7	CB	"	M	S/F	A
WA08	A-8	TOSCO	"	M	S/F	A
WA09	A-9	CB	"	M	S/F	A
WA10	A-10	CB	"	Dry	S/F	A
WA11	A-11	CB	"	M	S/F	A
WA12	A-12	CB	"	M	S/F	A
WA13	A-13	CB	"	Dry	S/F	A
WA21	A-102-1	CB	"			F
WA22	A-102-2	CB	"			F
WA24	A-102-3	CB				F
WD02	CB-2	CB	UPC1/UINTA (COMPOSITE)	M	-	A
WE03	CB-3	CB	UPC2	M	-	A
WE04	CB-4	CB	UPC2	M	-	A
WG12	SG-1-1	CB	LPC3	C	S_1	A
WD12	SG-1-2	CB	UPC1	C	S_1	A
WE11	SG-1A-1	CB	UPC2	S	-	A
WD11	SG-1A-2	CB	UPC1	S	-	A
WE61	SG-6-1	CB	UPC2	M	-	A
WG61	SG-6-2	CB	LPC3	M	-	A
WD61	SG-6-3	CB	UPC1	M	-	A
WY81	SG-8R	CB	Lower Aquifer	M	S_1	A
WG91	SG-9-1	CB	LPC3	B	-	A
WE91	SG-9-2	CB	UPC2	B	-	A
WD91	SG-9-3	CB	UPC1	B	-	A
WC91	SG-9-4	CB	Uinta	B	-	A
WG51	SG-10A-1	CB	LPC3	M	-	A
WE51	SG-10A-2	CB	UPC2	M	-	A
WD51	SG-10A-A	CB	UPC1/CON.UINTA	M	-	A
WD90	SG-10	CB	UN.UINTA	C	Q_1	A
WG52	SG-11-1	CB	LPC3	M	-	A
WE52	SG-11-2	CB	UPC2	M	-	A
WD52	SG-11-3	CB	UPC1	M	-	A
WG17	SG-17-1	CB	LPC3	B	-	A
WE17	SG-17-2	CB	UPC2	B	-	A
WD17	SG-17-3	CB	UPC1	B	-	A
WC17	SG-17-4	CB	Uinta	B	-	A
WD57	SG-17A	CB	UPC1	B	S_1	A
WG18	SG-18A-1	CB	LPC3	Q	-	A
WE18	SG-18A-2	CB	UPC2	Q	-	A
WD18	SG-18A-3	CB	UPC1	Q	-	A
WD19	SG-19	CB	UPC1	M	-	A
WG20	SG-20-1	TOSCO	LPC3	CAPPED	-	A
WE20	SG-20-2	TOSCO	UPC2	M	S_1	A
WD20	SG-20-3	TOSCO	UPC1	M	S_1	A
WH21	SG-21-1	CB	LPC4	M	-	A
WG21	SG-21-2	CB	LPC3	M	-	A
WE21	SG-21-3	CB	UPC2	M	-	A
WD21	SG-21-4	CB	UPC1	M	-	A
WV37	AT-1A	CB	COMPOSITE	M	-	A
WX38	AT-1A-1	CB	UPPER AQUIFER	M	-	A
WY45	AT-1C-1	CB	LOWER AQUIFER	W	Q	A
WY46	AT-1C-2	CB	LOWER AQUIFER	W	-	A
WX44	AT-1C-3	CB	UPPER AQUIFER	C	Q	-
WG41	AT-1D-1	CB	LPC3	B	-	A
WE41	AT-1D-2	CB	UPC2	B	-	A
WD41	AT-1D-3	CB	UPC1	B	-	A
WD14	14X-7-1	CB	UPC1	M	-	A
WD15	14X-7-2	CB	UPC1	B	-	A
WI19	22X-17	CB	UPC2 & LPC3	M	-	A
WI17	24X-17	CB	UPC2 & LPC3	M	-	A
WG23	21X12-1	CB	LPC3	M	-	A
WC23	21X12-2	CB	UN.UINTA	M	-	A
WE22	22X1-1	CB	UPC2	M	-	A
WD22	22X1-2	CB	UPC1	M	-	A
WC22	22X1-3	CB	UN.UINTA	M	-	A

Computer Code	Designation	Owner of Well	Formation	----Frequency--- Levels	Water Quality	Measured By
WC03	B-102-3	CB	UN.UINTA			
WG43	43X2-1	CB	LPC3	M	-	A
WE43	43X2-2	CB	UPC2	M	-	A
WW22	31X-12	CB	UN. UINTA	W	M_1/S	A
WX32	32X-12	CB	UPC2	C	S_1	A
WW32	32Y-12	CB	UN. UINTA	M	Q_1	A
WW13	41X-13	CB	UN. UINTA	W	M_1/S	A
WV10	TG-71-1	CB	COMPOSITE	Q	-	A
WX75	TH-5**	US	UPPER AQUIFER	Q	-	A
WX64	TH75-5A	US	" "	Q	-	A
WY64	TH75-5B	US	LOWER "	Q	-	A
WX69	TH75-9A	US	UPPER "	Q	-	A
WY69	TH75-9B	US	LOWER "	Q	-	A
WY68	TH75-10B	US	" "	Q	-	A
WX65	TH75-13A	US	UPPER "	Q	-	A
WY65	TH75-13B	US	LOWER "	Q	-	A
WX67	TH75-18A	US	UPPER "	Q	-	A
WY67	TH75-18B	US	LOWER "	Q	-	A
WX72	TH75-15A	US	UPPER "	Q	-	A
WY72	TH75-15B	US	LOWER "	Q	-	A
WY66	EQUITY 1	EQUITY	" "	Q	-	A
WY70	EQUITY SIA	EQUITY	" "	Q	-	A
WV01	GREENO-404	SHELL	COMPOSITE	Q	-	A
WX71	CER RB-D-02	US	UPPER AQUIFER	Q	-	A
WY71	CER RB-D-03	US	LOWER "	Q	-	A
WY75	TG-71-3	TOSCO	" "	Q	-	A
WY78	TG-71-4	"	" "	Q	-	A
WY76	TG-71-5	"	" "	Q	-	A
WV02	OLDLAND 3	"	COMPOSITE	Q	-	A
WV03	GP-17X-BG	US	"	Q	-	A
WV04	BUTE 25	TOSCO	"	Q	-	A
WV05	LIBERTY BELL 12	TOSCO	"	Q	-	A
WX73	UNION 8-1	UNION	UPPER AQUIFER	Q	-	A
WY77	GETTY 9-4D	GETTY	LOWER "	Q	-	A
WY79	EQUITY BS-13	EQUITY	" "	Q	-	A

**Colony TH-5 replaced Colony 12-596
B = Bimonthly
M = Monthly
S = Semiannual
S/F = Semiannual field measurements
C = Continuous
Q = Quarterly
A = Applicant
M/D = Monthly if not diverted
M_1 = Monthly for field measurements + Fluoride
Q_1 = Quarterly for field measurements + Fluoride
S_1 = Semiannual but may be changed pending evaluation of hydrographs

Stream Flow

Computer Code	Station Number	Description	-----Frequency----		Measured By
			Discharge	Water Quality	
WU07 (M)	09306007	Piceance Creek Below Rio Blanco	C	P	F
WU22	09306022	Stewart Gulch Above West Fork	C	P	F
WU26	09306226	White River above Crooked Wash near White River City	C	P	F
WU36	09306036	Sorghum Gulch at Mouth	C	P	F
WU39	09306039	Cottonwood Gulch	C	P	F
WU42 (M)	09306042	Tributary of Piceance Creek (Little Gardenhire Gulch)	C	P	F
WU48	09304800	White River near Meeker (below return flows)	C	P	F
WU52	09306052	Scandard Gulch at Mouth	C	P	F
WU58	09306058	Willow Creek	C	P	F
WU61 (M)	09306061	Piceance Creek above Hunter Creek	C	P	F
WU90	09306290	White River below Boise Creek near Rangely)		P	F

(M) = Major Site

Springs and Seeps

Computer Code	Designation	---------Frequency----------		Measured By
		Discharge	Water Quality	
WS01	CB S-1	M/D	M/D	F
WS02	CB S-2	M	M	F
WS03	CB S-3	M/D	M/D	F
WS04	CB S-4	M	M	F
WS06	CB S-6	M	M	F
WS66	CB S-6A	M	M	F
WS07	CB S-7	M	M	F
WS08	CB S-8	M	M	F
WS09	CB S-9	M/D	M/D	F
WS10	CB S-10	M/D	M/D	F
WS11	CB SEEP A	M/D	M/D	F
WS12	CB S-102	M	M	F
WS13	CB S-102A	M	M	F
WS21	CER-1	Q	-	WRD
WS22	B-3	Q	-	WRD
WS24	F-3	Q	-	WRD
WS26	W-4	Q	-	WRD
WS28	CER-7	Q	-	WRD
WS30	P3 & P3A	Q	-	WRD
WS31	CER-6	Q	-	WRD
WS33	S-2	Q	-	WRD
WS34	W-3	Q	-	WRD

Precipitation

Computer Code	Designation	Name of Station	Frequency	Measured By
AB23	023	CB Station 023	C	A
AD28	028	Lysimeter site at Shale Pile	C	A

B = Bimonthly
M = Monthly
S = Semiannual
S/F = Semiannual field measurements
C = Continuous
Q = Quarterly
A = Applicant
M/D = Monthly if not diverted.
F = USGS
P = Periodically measured
WRD = Water Resources Division of the USGS

TABLE 1.2-2

Deep Well Index

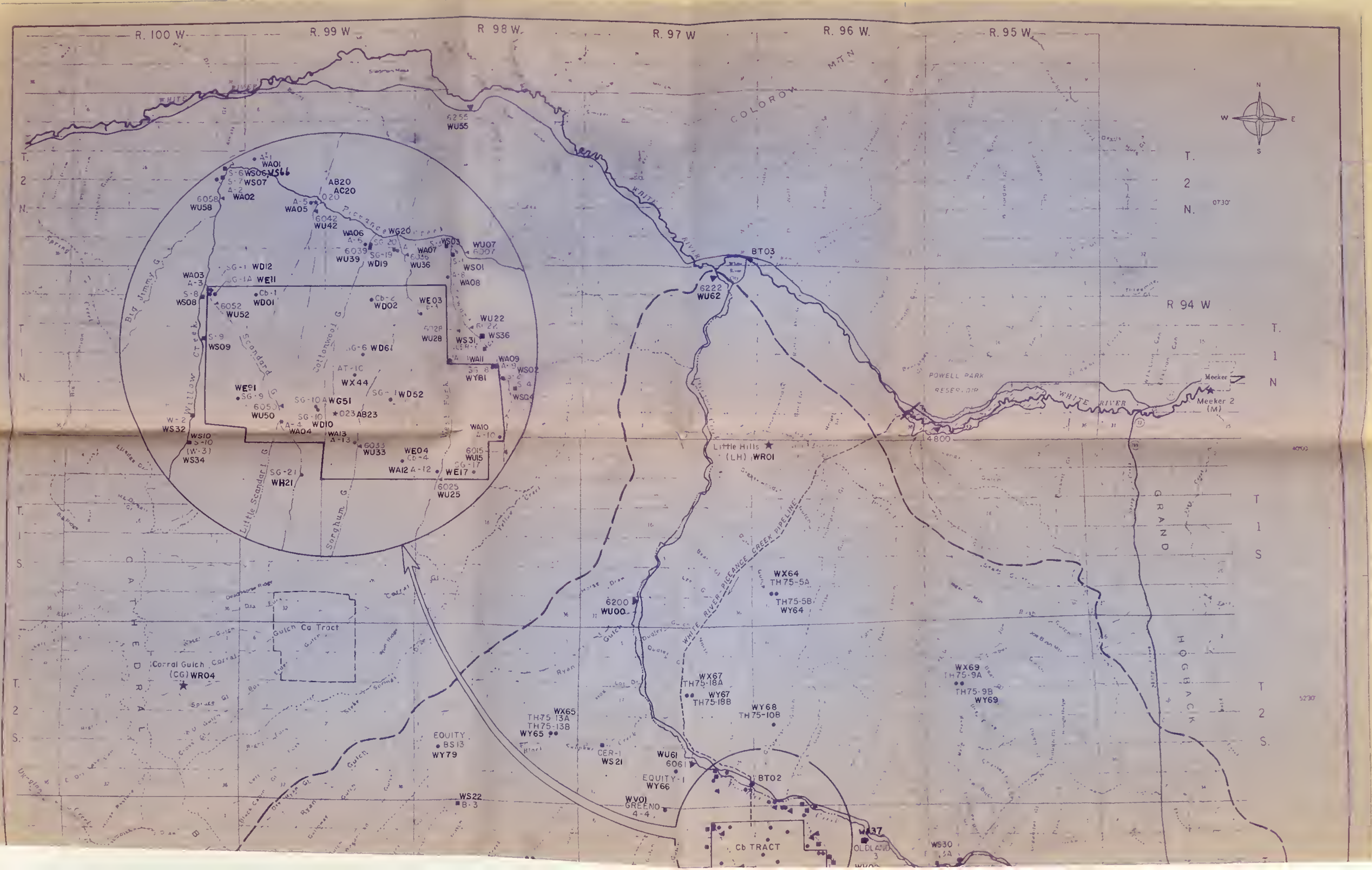
Aquifer or Zone	General Location	Computer Code	Well Designation	Levels Data on Page	Levels Plot on Page	Water Quality Data on Page
Uinta	Close-In	WC17	SG-17-4	I-103	I-142	No Data
		WC22	22X1-3	I-103	I-150	No Data
		WC23	21X12-2	I-103	I-148	No Data
		WC91	SG-9-4	I-103	I-139	No Data
Upper	Close-In	WX38	AT-1A-1	I-113	I-129	No Data
		WX44	AT-1C-3	I-108, I-117	I-130	I-569
	Remote	WX64	TH75-5A	I-109	I-156	No Data
		WX65	TH75-13A	I-109	I-157	No Data
		WX67	TH75-18A	I-109	I-158	No Data
		WX69	TH75-9A	I-109	I-159	No Data
		WX71	CER RB-D-02	I-109	I-160	No Data
		WX72	TH75-15A	I-109	I-161	No Data
		WX73	UNION 8-1	I-109	I-162	No Data
		WX75	TH-5	No Data	I-163	No Data
Lower	Close-In	WY44	AT-1	I-110	I-131	No Data
		WY45	AT-1C-1	I-110	I-130	I-572
		WY46	AT-1C-2	I-110	I-130	No Data
		WY81	SG-8R	I-110	I-138	I-572
	Remote	WY64	TH75-5B	I-111	I-165	No Data
		WY65	TH75-13B	I-111	I-166	No Data
		WY66	EQUITY 1	No Data	I-167	No Data
		WY67	TH75-18B	I-111	I-168	No Data
		WY68	TH75-10B	I-111	I-169	No Data
		WY69	TH75-9B	I-111	I-170	No Data
		WY70	EQUITY SIA	I-111	I-171	No Data
		WY71	CER RB-D-03	I-111	I-172	No Data
		WY72	TH75-15B	I-111	I-173	No Data
		WY75	TG-71-3	I-111	I-174	No Data
		WY76	TG-71-5	I-111	I-175	No Data
		WY77	GETTY 9-40	No Data	I-176	No Data
		WY78	TG-71-4	I-111	I-177	No Data
		WY79	EQUITY BS-13	I-111	I-178	No Data
Composite	Close-In	WV07	21X12 - Recompleted	No Data	No Data	No Data
		WV08	22X-1 - Recompleted	No Data	No Data	No Data
		WV09	43X-2 - Recompleted	No Data	No Data	No Data
		WV10	TG-71-1	I-112	I-185	No Data
		WV37	AT-1A	I-112	I-129	No Data
	Remote	WV01	GREENO 404	I-112	I-180	No Data
		WV02	OLDLAND 3	I-112	I-181	No Data
		WV03	GP-17X-BG	I-112	I-182	No Data
		WV04	BUTE 25	I-112	I-183	No Data
		WV05	LIBERTY BELL 12	I-112	I-184	No Data
		WV06	TOSCO WELL	No Data	No Data	No Data
		WV40	AT-1B	No Data	I-129	No Data
UPC1	Close-In	WD02	CB-2	I-104	I-133	No Data
		WD11	SG-1A-2	I-104	I-135	No Data
		WD12	SG-1-2	I-104, I-120	I-136	I-560
		WD14	14X-7-1	I-104	I-146	No Data
		WD15	14X-7-2	I-104	I-146	No Data
		WD17	SG-17-3	I-104	I-142	No Data
		WD18	SG-18A-3	I-104	I-143	No Data
		WD19	SG-19	I-104	I-133	No Data
		WD20	SG-20-3	I-105	I-144	I-560
		WD21	SG-21-4	I-105	I-145	No Data
		WD22	22X1-3	I-105	I-149	
		WD41	AT-1D-3	I-105	I-131	No Data
		WD51	SG-10A-A	I-105	I-140	No Data
		WD52	SG-11-3	I-105	I-141	No Data
		WD57	SG-17-A	I-105	I-134	I-560
		WD61	SG-6-3	I-105	I-137	No Data
		WD90	SG-10	I-105, I-120	I-134	No Data
		WD91	SG-9-3	I-105	I-139	No Data

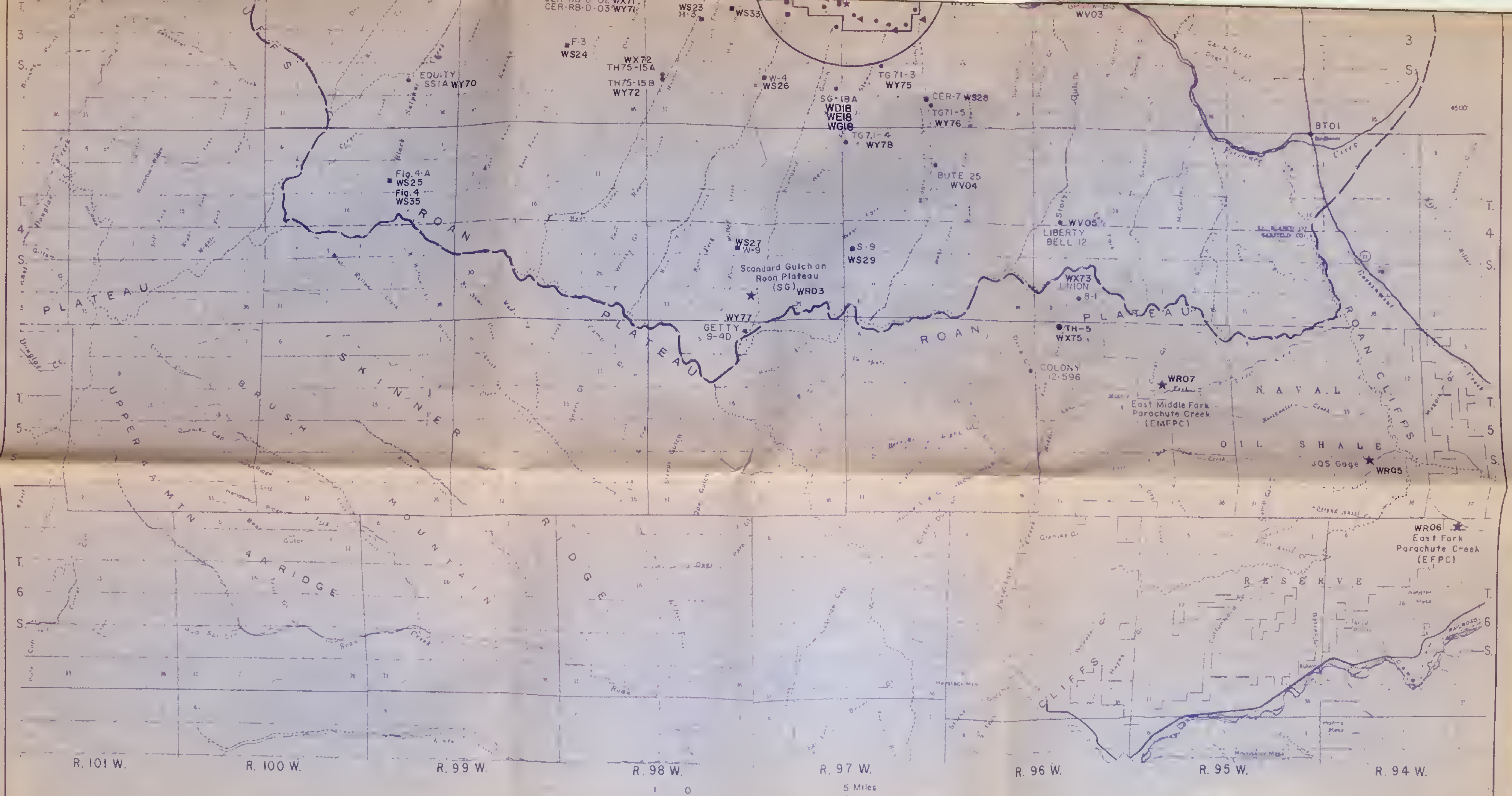
TABLE 1.2-2 (Contd)

Deep Well Index

Aquifer or Zone	General Location	Computer Code	Well Designation	Levels Data on Page	Levels Plot on Page	Water Quality Data on Page
	Close-In (Seepage)	WW13	41X-13	I-197	I-134	I-198*
		WW22	31X-12	I-197	I-134	I-198*
		WW32	32Y-12	I-197	No Data	I-199*
UPC2	Close-In	WE03	Cb-3	I-106	I-133	No Data
		WE04	Cb-4	I-106	I-134	No Data
		WE11	SG-1A-1	I-106	I-135	No Data
		WE17	SG-17-2	I-106	I-142	No Data
		WE18	SG-18-2	I-106	I-143	No Data
		WE20	SG-20-2	I-106	I-144	I-563
		WE22	22X1-1	No Data	No Data	No Data
		WE21	SG-21-3	I-106	I-145	No Data
		WE41	AT-1D-2	I-106	I-131	No Data
		WE43	43X2-2	I-106	I-153	No Data
		WE51	SG-10A-2	I-106	I-140	No Data
		WE52	SG-11-2	I-106	I-141	No Data
		WE61	SG-6-1	I-106	I-137	No Data
		WE91	SG-9-2	I-106	I-139	No Data
		WX32	32X-12	I-108, I-113	I-151	I-569
	Close-In (Injection)	WI17	24X-17	I-194	I-195	No Data
		WI18	11X18	No Data	No Data	No Data
		WI19	22X17	I-194	I-196	No Data
LPC3	Close-In	WG12	SG-1-1	I-107, I-124	I-136	I-566
		WG17	SG-17-1	I-107	I-142	No Data
		WG18	SG-18A-1	I-107	I-143	No Data
		WG20	SG-20-1	I-107	No Data	I-566
		WG21	SG-21-2	I-107	I-145	No Data
		WG23	21X12-1	I-107	I-147	No Data
		WG41	AT-1D-1	I-107	I-131	No Data
		WG43	43X2-1	I-107	I-152	No Data
		WG51	SG-10A-1	I-107	I-140	No Data
		WG52	SG-11-1	I-107	I-141	No Data
		WG61	SG-6-2	I-107	I-137	No Data
		WG91	SG-9-1	I-107	I-139	No Data
LPC4	Close-In	WH21	SG-21-1	I-107	I-145	No Data

* Field Measurements only.


R. 100 W.
R. 99 W.
R. 98 W.
R. 97 W.
R. 96 W.
R. 95 W.
R 94 W
T. 2 N.
T. 1 N.
T. 1 S.
T. 2 S.
N
W
E
S
WHITE RIVER
COLOROW MTN
6255
WU55
BT03
6222
WU62
POWELL PARK RESERVOIR
Meeker
Meeker 2 (M)
4800
Little Hills (LH) WR01
GRAND HOGBACK
CATHEDRAL
WHITE RIVER-PICEANCE CREEK PIPELINE
Gulch Ca Tract
Corral Gulch (CG) WR04
A-1
WA01
S-6 WS06, WS66
S-7 WS07
A-2
WA02
6058
WU58
AB20
AC20
020
A-5
WA05
6042
WU42
Piceance Creek
WA06
A-6
WG20
SG 20
6039
WU39
SG-19
WD19
WA07
6036
WU36
S-3 WS03
WU07
6007
S-1
WS01
A-8
WA08
SG-1 WD12
WA03
A-3
SG-1A WE11
S-8
WS08
Cb-1
WD01
6052
WU52
Cb-2
WD02
WE03
WU22
6122
6028
WU28
WS31
WS36
S-9
WS09
SG-6 WD61
WA11
WA09
A-9
WS02
SG 8
WY81
S 4
WS04
AT-1C
WX44
SG-1 WD52
WE91
SG-9
6050
WU50
SG-10A WG51
023 AB23
SG-10
WD10
A-4
WA04
W-2
WS32
WS10
S-10
(W-3)
WS34
WA13
A-13
6033
WU33
WA10
A-10
WE04
Cb-4
6015
WU15
SG-17
WA12 A-12
WE17
SG-21
WH21
6025
WU25
Big Jimmy G.
Willow Creek
Scandard G
Little Scandard G
Cottonwood G
Sorghum G
West Fork
6200
WU00
WX64
TH75-5A
TH75-5B
WY64
WX67
TH75-18A
WY67
TH75-18B
WY68
TH75-10B
WX69
TH75-9A
TH75-9B
WY69
WX65
TH75-13A
TH75-13B
WY65
EQUITY
BS13
WY79
CER-1
WS21
WU61
6061
EQUITY-1
WY66
BT02
WV01
GREENO
4-4
WS22
B-3
Cb TRACT
W637
OLDLAND
3
WS30
3A
Ryan Gulch
Dudley Gulch
Yellow Creek
Corral Gulch


CER-RB-D-03 WY71
WS23
H-3
WS33
WV03
F-3
WS24
WX72
TH75-15A
TH75-15B
WY72
EQUITY
SSIA WY70
W-4
WS26
SG-18A
WD18
WE18
WG18
TG71-3
WY75
CER-7 WS28
TG71-5
WY76
TG71-4
WY78
BT01
BUTE 25
WV04
Fig. 4-A
WS25
Fig. 4
WS35
ROAN
WV05
LIBERTY
BELL 12
WS27
W-9
S-9
WS29
Scandard Gulch on
Roan Plateau
(SG) WR03
WX73
UNION
8-1
PLATEAU
WY77
GETTY
9-40
PLATEAU
ROAN
PLATEAU
TH-5
WX75
ROAN CLIFFS
COLONY
12-596
WR07
East Middle Fork
Parachute Creek
(EMFPC)
NAVAL
OIL SHALE
JQS Gage
WR05
SKINNER
BRUSH
UPPER
RIDGE
MOUNTAIN
RIDGE
WR06
East Fork
Parachute Creek
(EFPC)
RESERVE
CLIFFS
T. 3 S.
T. 4 S.
T. 5 S.
T. 6 S.
R. 101 W.
R. 100 W.
R. 99 W.
R. 98 W.
R. 97 W.
R. 96 W.
R. 95 W.
R. 94 W.
1 0 5 Miles

(Base map supplied by the United States Geological Survey)

LEGEND

Symbol	Description
◆	Traffic counter stations
◀	Stream gaging station (prefix 0930 omitted from Station No.)
•	Observation well (may have multiple piezometers)
▪	Spring or seep
★	Precipitation station
———	Paved roads
═-----.	Other roads and trails
—— ——	Topographic basin of Piceance Creek

NOTES

See Exhibit B for explanation of monitoring station designations, category and normal frequency of measurements, and entities making measurements.

EXHIBIT A

KEY FEATURES OF HYDROLOGIC MONITORING PROGRAM FOR Cb TRACT

PICEANCE CREEK BASIN
WATER DIVISION NO 5
STATE OF COLORADO

TX 162

DECEMBER 1978

LEVELS AND
FLOWS

1.2.1 Levels and Flows

Hydrologic flows of surface streams, springs and seeps, and water levels in alluvial wells, bedrock wells and impoundments are reported in the sub-sections which follow. Documents and/or permits (IMP, WAP, and NPDES) that require monitoring of these water types are identified within each sub-section.

Tabulated data and time series plots for all water locations follow in respective sub-sections.

SURFACE
STREAMS

1.2.1.1 Surface Streams

Daily mean discharge data for eight major surface water gauging stations monitored for the Interim Monitoring Program (IMP) are included in this section. Location of these monitoring stations are shown on Figures 1.2.1.1-1 and 1.2.1.1-2. Data presented cover 1983 and 1984 water years, October 1982 through April 1983. The following table lists stations and the pages summarizing data for November.

TABLE 1.2.1.1-1

Guide for Surface Water Gauging Stations
Discharge Data

Computer Code	Stations for Interim Monitoring	Tabulated Data Presented On Page
WU07	09306007	I-19
WU22	09306022	I-21
WU36	09306036	I-23
WU39	09306039	I-25
WU42	09306042	I-27
WU52	09306052	I-29
WU58	09306058	I-30
WU61	09306061	I-32
WU75	09306175	I-34
WU00	09306200	I-35

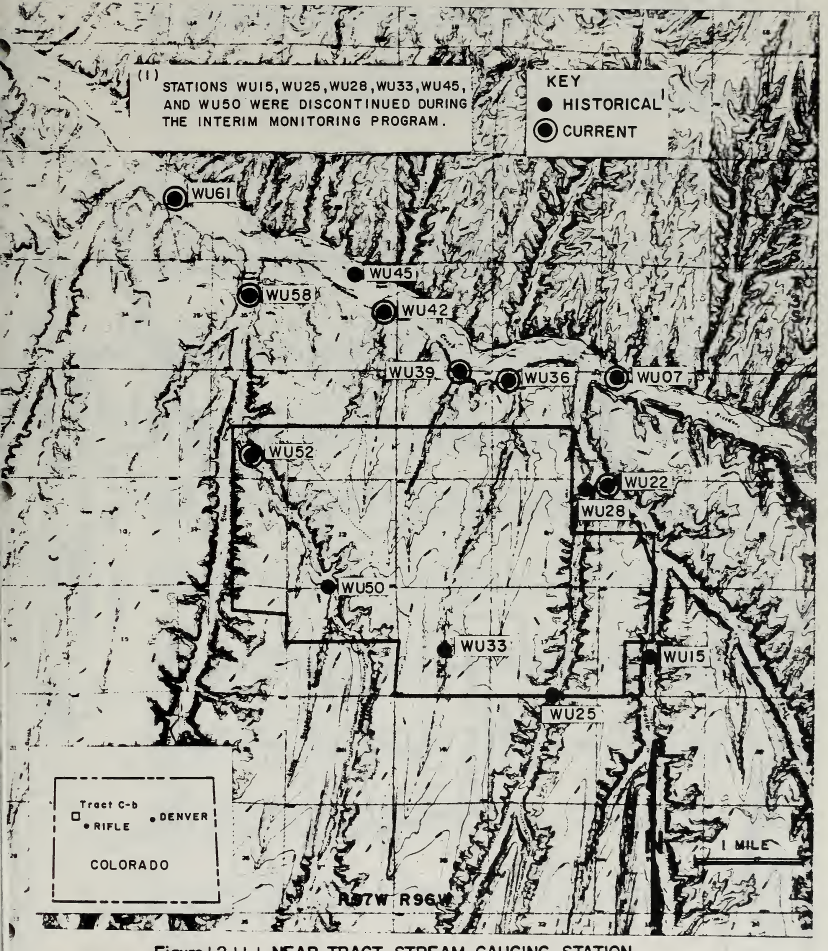

(1) STATIONS WU15, WU25, WU28, WU33, WU45, AND WU50 WERE DISCONTINUED DURING THE INTERIM MONITORING PROGRAM.
KEY
● HISTORICAL(1)
◉ CURRENT
WU61
WU45
WU58
WU42
WU39
WU36
WU07
WU52
WU22
WU28
WU50
WU33
WU15
WU25
Tract C-b
RIFLE
DENVER
COLORADO
1 MILE
R97W R96W

Figure I.2.1.1-1 NEAR-TRACT STREAM GAUGING STATION MONITORING NETWORK

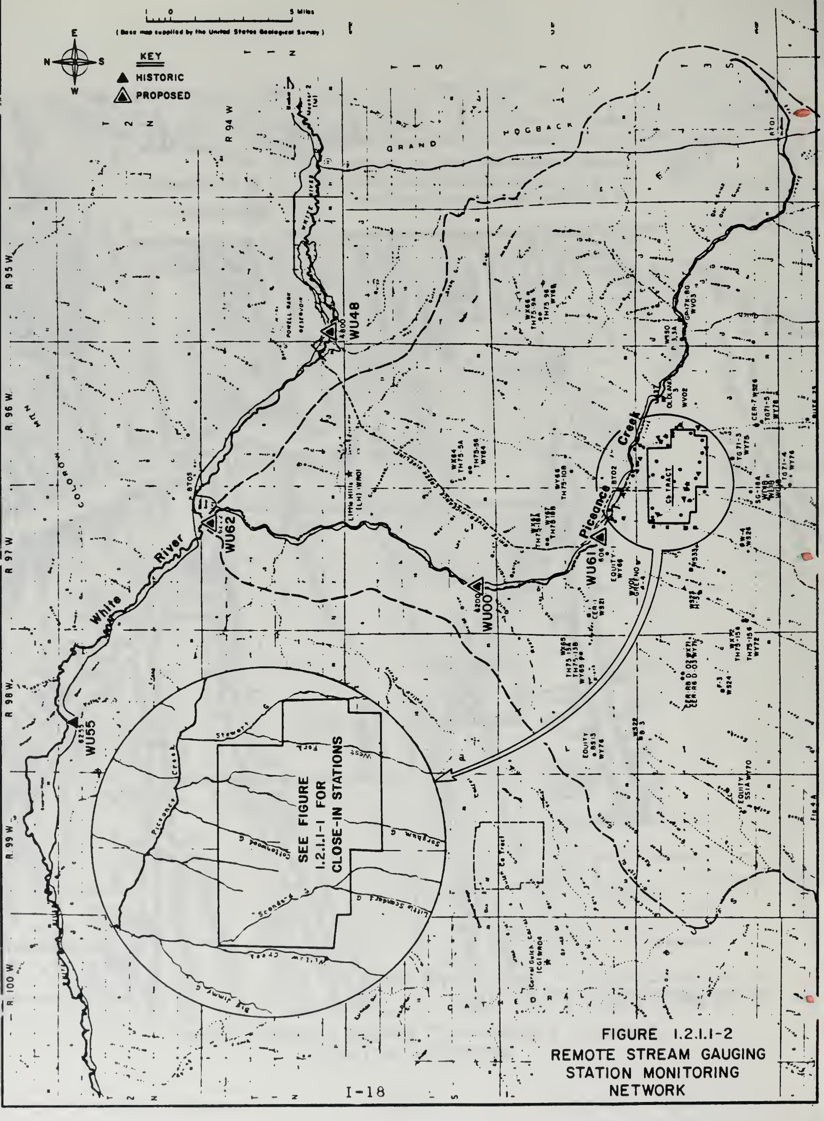

0
5 Miles
(Base map supplied by the United States Geological Survey)
E
N
S
W
KEY
HISTORIC
PROPOSED
R 94 W
R 95 W
R 96 W
R 97 W
R 98 W
R 99 W
R 100 W
T 1 N
T 2 N
T 1 S
T 2 S
T 3 S
GRAND HOGBACK
White River
Piceance Creek
WU48
WU62
WU61
WU00
WU55
POWELL PARK RESERVOIR
COLORADO
Little Hills (LH) WR01
Cb TRACT
SEE FIGURE 1.2.1.1-1 FOR CLOSE-IN STATIONS
Stewart G
West Fork
Piceance Creek
Cottonwood G
Sorghum G
Scandard G
Little Scandard G
Willow Creek
Big Jimmy G
Corral Gulch (CG) WR04
Ca Tract
FEDERAL

FIGURE 1.2.1.1-2
REMOTE STREAM GAUGING
STATION MONITORING
NETWORK

DISCHARGE IN CFS, WATER YEAR 1983 MEAN VALUES FOR 9306007

PICEANCE CREEK BELOW RIO BLANCO, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	15.0	9.3	8.4	6.0	5.7	8.6	15.0	123.0	277.0	54.0	43.0	23.0
2	12.0	9.0	7.9	6.0	5.9	10.0	14.0	129.0	260.0	51.0	41.0	23.0
3	12.0	8.3	7.9	6.1	6.1	8.4	14.0	129.0	243.0	52.0	41.0	22.0
4	12.0	8.5	7.4	6.1	6.3	7.8	14.0	130.0	226.0	50.0	41.0	23.0
5	13.0	7.9	7.6	6.2	6.6	8.2	13.0	135.0	205.0	50.0	41.0	23.0
6	11.0	8.0	7.7	6.2	6.2	8.8	13.0	156.0	180.0	47.0	39.0	22.0
7	11.0	8.1	7.7	6.5	6.0	8.0	13.0	161.0	169.0	44.0	38.0	21.0
8	11.0	8.2	7.8	6.5	6.0	8.0	14.0	155.0	159.0	44.0	38.0	21.0
9	11.0	8.5	7.1	6.8	6.0	8.4	15.0	181.0	154.0	44.0	39.0	20.0
10	11.0	9.3	8.1	6.7	6.3	10.0	16.0	210.0	141.0	45.0	38.0	20.0
11	10.0	10.0	8.0	6.7	6.3	14.0	17.0	234.0	127.0	44.0	37.0	19.0
12	10.0	8.8	7.8	6.6	6.6	17.0	17.0	224.0	129.0	43.0	39.0	19.0
13	11.0	8.5	6.7	6.6	6.3	18.0	17.0	194.0	131.0	42.0	63.0	18.0
14	11.0	8.5	7.0	6.5	6.0	25.0	15.0	187.0	112.0	42.0	42.0	19.0
15	11.0	8.3	7.2	6.5	6.0	25.0	15.0	183.0	105.0	41.0	39.0	19.0
16	10.0	8.8	7.2	6.4	6.3	20.0	15.0	190.0	101.0	41.0	36.0	18.0
17	9.8	8.2	6.6	6.4	6.0	19.0	16.0	191.0	93.0	43.0	36.0	17.0
18	9.4	8.7	6.5	6.1	6.0	17.0	22.0	185.0	88.0	43.0	37.0	17.0
19	9.4	9.1	6.7	5.6	6.3	15.0	48.0	221.0	83.0	42.0	35.0	16.0
20	9.4	8.6	6.9	5.6	5.7	14.0	58.0	228.0	78.0	41.0	34.0	16.0
21	9.2	8.8	7.0	5.6	5.7	14.0	74.0	232.0	71.0	43.0	32.0	16.0
22	8.9	8.4	7.6	5.6	6.0	14.0	89.0	264.0	65.0	49.0	30.0	16.0
23	9.0	8.3	8.0	5.6	6.2	14.0	74.0	299.0	63.0	52.0	29.0	17.0
24	8.6	8.3	6.8	5.8	7.4	13.0	90.0	333.0	65.0	49.0	28.0	17.0
25	8.3	8.3	7.3	5.8	8.0	13.0	116.0	345.0	66.0	47.0	28.0	16.0
26	8.3	8.3	7.8	5.8	7.1	13.0	115.0	350.0	72.0	55.0	27.0	15.0
27	9.8	8.0	8.3	6.1	7.1	13.0	102.0	352.0	72.0	59.0	26.0	15.0
28	9.1	7.6	7.5	6.1	7.7	13.0	99.0	345.0	63.0	49.0	26.0	15.0
29	8.6	8.3	6.9	6.1		12.0	97.0	329.0	59.0	47.0	25.0	15.0
30	8.9	8.7	6.4	6.4		13.0	112.0	313.0	56.0	42.0	25.0	16.0
31	9.1		5.9	6.1		14.0		296.0		42.0	24.0	
TOTAL*	317.8	255.6	227.7	191.1	177.9	416.2	1349.0	7004.0	3713.0	1437.0	1097.0	554.0

WATER YEAR TOTAL - 16740.30 MEAN - 45.86

*CFS - Days

Preliminary Record

DISCHARGE IN CFS, WATER YEAR 1984 MEAN VALUES FOR 9306007

PICEANCE CREEK BELOW RIO BLANCO, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	16.0	18.0										
2	18.0	18.0										
3	19.0	17.0										
4	20.0											
5	20.0											
6	20.0											
7	20.0											
8	20.0											
9	19.0											
10	19.0											
11	19.0											
12	19.0											
13	21.0											
14	24.0											
15	24.0											
16	21.0											
17	20.0											
18	19.0											
19	19.0											
20	19.0											
21	19.0											
22	20.0											
23	20.0											
24	20.0											
25	20.0											
26	20.0											
27	20.0											
28	20.0											
29	19.0											
30	19.0											
31	19.0											
TOTAL*	612.0	53.0										

WATER YEAR TOTAL MEAN

*CFS - days

Preliminary Record

DISCHARGE IN CFS, WATER YEAR 1983 MEAN VALUES FOR 9306022

STEWART GULCH ABOVE WEST FORK NEAR RIO BLANCO, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	.74	.94	1.2	1.2	1.4	1.9	1.5	1.9	1.7	2.1	5.3	8.1
2	.74	.94	1.2	1.2	1.4	2.7	1.7	1.9	1.7	2.2	5.3	8.3
3	.81	.94	1.2	1.2	1.4	1.7	1.7	1.9	1.7	2.2	5.3	8.5
4	.81	.94	1.2	1.2	1.4	1.6	1.6	1.9	1.7	2.2	5.4	9.0
5	.81	.95	1.2	1.2	1.4	1.5	1.6	1.9	1.7	2.3	5.4	8.8
6	.81	.96	1.2	1.2	1.4	1.6	1.7	2.0	1.8	2.3	5.4	8.8
7	.81	.96	1.2	1.2	1.4	1.5	1.6	1.8	1.7	2.4	5.5	8.9
8	.82	.97	1.2	1.2	1.4	1.6	1.6	1.8	1.6	2.5	5.6	8.4
9	.82	.98	1.2	1.2	1.5	1.8	1.7	1.7	1.6	2.5	5.7	8.5
10	.82	.98	1.3	1.3	1.5	1.4	1.6	1.7	1.6	2.6	5.8	8.5
11	.82	.99	1.3	1.3	1.5	1.1	1.6	1.7	1.3	2.6	5.9	8.7
12	.89	1.00	1.3	1.3	1.5	1.1	1.6	1.8	1.1	2.8	6.1	8.8
13	.89	1.00	1.3	1.3	1.5	0.96	1.7	1.8	1.7	2.8	6.2	8.5
14	.96	1.00	1.3	1.3	1.5	0.83	1.8	1.8	1.6	2.9	6.5	8.7
15	.90	1.00	1.2	1.3	1.5	0.68	1.8	1.8	1.6	3.0	6.6	8.4
16	.97	1.00	1.2	1.3	1.5	0.53	1.8	1.8	1.6	3.1	6.7	8.2
17	.90	1.10	1.3	1.3	1.5	0.41	1.8	1.8	1.6	3.3	7.0	6.3
18	.91	1.10	1.3	1.3	1.6	0.41	1.7	1.8	1.6	3.4	7.4	3.9
19	.91	1.10	1.3	1.3	1.6	0.3	1.7	1.9	1.6	3.5	7.9	3.8
20	.91	1.10	1.3	1.3	1.6	0.41	1.7	1.9	1.7	3.5	8.9	3.7
21	.91	1.10	1.3	1.3	1.6	0.34	1.8	1.9	1.8	3.6	9.2	3.7
22	.91	1.10	1.3	1.4	1.7	0.1	1.8	1.9	1.8	3.8	8.3	3.7
23	.92	1.20	1.3	1.4	1.9	1.2	1.8	1.8	1.8	4.2	5.9	3.7
24	.92	1.20	1.3	1.4	2.0	1.5	1.7	1.9	2.1	4.2	6.1	3.6
25	.92	1.20	1.3	1.4	1.9	1.3	1.7	1.9	2.8	4.5	6.3	3.6
26	.92	1.20	1.3	1.4	1.6	0.92	1.7	1.8	2.1	4.8	6.5	3.6
27	.93	1.20	1.2	1.4	1.6	1.1	1.8	1.7	2.1	4.9	6.7	3.5
28	.93	1.20	1.2	1.4	1.8	1.3	1.8	1.8	2.0	4.9	7.3	3.5
29	.93	1.20	1.2	1.4		1.3	1.8	1.8	2.0	5.3	7.7	3.4
30	.93	1.20	1.2	1.4		1.4	1.9	1.8	2.1	5.4	7.9	3.4
31	.93		1.2	1.4		1.5		1.7		5.3	7.9	
TOTAL*	27.21	31.74	38.7	40.4	43.6	35.99	51.3	56.6	52.8	105.1	203.7	190.5

WATER YEAR TOTAL - 877.64 MEAN - 2.40

*CFS - Days

Preliminary Record

DISCHARGE IN CFS, WATER YEAR 1983 MEAN VALUES FOR 9306022

STEWART GULCH ABOVE WEST FORK NEAR RIO BLANCO, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	3.5	2.1										
2	3.6	2.1										
3	3.6	2.0										
4	3.3	2.0										
5	3.2	2.1										
6	3.1	2.1										
7	2.7	2.2										
8	2.4											
9	2.4											
10	2.4											
11	2.4											
12	2.4											
13	2.4											
14	2.6											
15	2.4											
16	2.4											
17	2.4											
18	2.3											
19	2.2											
20	2.2											
21	2.2											
22	2.2											
23	2.2											
24	2.2											
25	2.2											
26	2.2											
27	2.1											
28	2.1											
29	2.1											
30	2.1											
31	2.1											
TOTAL*	77.6	14.6										
WATER YEAR TOTAL				MEAN								

*CFS - [illegible]s

Preliminary Record

DISCHARGE IN CFS, WATER YEAR 1983 MEAN VALUES FOR 9306036

SORGHUM GULCH AT MOUTH NEAR RIO BLANCO, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.56	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	1.60	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.95	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.76	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.64	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL*	0.0	0.0	0.0	0.0	3.05	15.37	0.0	0.0	0.0	0.0	0.0	0.0

WATER YEAR TOTAL - 18.79 MEAN - 0.05

*CFS - Days

Preliminary Record

DISCHARGE IN CFS, WATER YEAR 1984 MEAN VALUES FOR 9306036

SORGHUM GULCH AT MOUTH NEAR RIO BLANCO, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	0.0	0.0										
2	0.0	0.0										
3	0.0	0.0										
4	0.0	0.0										
5	0.0	0.0										
6	0.0	0.0										
7	0.0	0.0										
8	0.0	0.83										
9	0.0	0.06										
10	0.0											
11	0.0											
12	0.0											
13	0.0											
14	0.0											
15	0.0											
16	0.0											
17	0.0											
18	0.0											
19	0.0											
20	0.0											
21	0.0											
22	0.0											
23	0.0											
24	0.0											
25	0.0											
26	0.0											
27	0.0											
28	0.0											
29	0.0											
30	0.0											
31												
TOTAL*	0.0	0.89										

WATER YEAR TOTAL MEAN

*CFS - Days

Preliminary Record

DISCHARGE IN CFS, WATER YEAR 1983 MEAN VALUES FOR 9306039

COTTONWOOD GULCH NEAR RANGELY, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.82	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL*	0.0	0.0	0.0	0.0	1.32	7.14	0.0	0.0	0.0	0.0	0.0	0.0

WATER YEAR TOTAL - 8.46 MEAN - 0.02

*CFS - Days

Preliminary Record

DISCHARGE IN CFS, WATER YEAR 1984 MEAN VALUES FOR 9306039

COTTONWOOD GULCH NEAR RANGELY, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	0.0	0.0										
2	0.0	0.0										
3	0.0	0.0										
4	0.0	0.0										
5	0.0	0.0										
6	0.0	0.0										
7	0.0	0.0										
8	0.0	0.0										
9	0.0	0.0										
10	0.0	0.0										
11	0.0	0.0										
12	0.0	0.0										
13	0.0	0.0										
14	0.0	0.0										
15	0.0	0.0										
16	0.0	0.0										
17	0.0	0.0										
18	0.0	0.0										
19	0.0	0.0										
20	0.0	0.0										
21	0.0	0.0										
22	0.0	0.0										
23	0.0	0.0										
24	0.0	0.0										
25	0.0	0.0										
26	0.0	0.0										
27	0.0	0.0										
28	0.0	0.0										
29	0.0	0.0										
30	0.0	0.0										
31	0.0	0.0										
TOTAL*	0.0	0.0										

WATER YEAR TOTAL MEAN

*CFS - Days

DISCHARGE IN CFS, WATER YEAR 1983 MEAN VALUES FOR 9306042

PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	1.00	0.39	0.68	0.75	0.80	0.89	0.11	0.53	0.53	0.71	0.81	0.62
2	0.80	0.45	0.67	0.73	0.81	0.89	0.29	0.53	0.71	0.71	0.86	0.63
3	0.80	0.56	0.67	0.72	0.81	0.77	0.36	0.44	0.58	0.77	0.74	0.65
4	0.80	0.54	0.65	0.71	0.83	0.76	0.27	0.66	0.53	0.82	0.84	0.96
5	0.76	0.77	0.63	0.71	0.80	0.90	0.32	0.53	0.71	0.88	0.59	1.1
6	0.69	0.75	0.62	0.73	0.81	0.87	0.31	0.58	0.58	0.93	0.67	0.66
7	0.70	0.77	0.65	0.71	0.83	0.80	0.36	0.53	0.58	0.71	0.67	0.44
8	0.64	0.87	0.66	0.71	0.84	0.76	0.06	0.49	0.93	0.65	0.71	0.62
9	0.62	0.84	0.69	0.71	0.86	0.75	0.07	0.44	1.4	0.67	0.62	0.48
10	0.58	0.90	0.68	0.71	0.87	1.00	0.11	0.49	0.77	0.66	0.52	0.50
11	0.60	0.93	0.67	0.72	0.87	1.80	0.34	0.53	0.67	0.66	0.60	0.47
12	0.56	1.00	0.74	0.72	0.87	0.90	0.45	0.71	0.82	0.66	0.62	0.45
13	0.51	0.98	0.80	0.77	0.87	0.84	0.56	0.40	0.49	0.66	0.71	0.46
14	0.49	1.10	0.82	0.83	0.87	0.65	0.82	0.44	0.59	0.66	0.65	0.43
15	0.47	0.90	0.81	0.83	0.87	0.07	0.72	0.53	0.69	0.66	0.61	0.44
16	0.46	0.80	0.76	0.83	0.88	0.08	0.77	0.58	0.62	0.65	0.59	0.44
17	0.43	0.69	0.74	0.84	0.88	0.09	0.79	0.93	0.60	0.65	0.54	0.45
18	0.44	0.62	0.74	0.84	0.75	0.09	0.65	0.88	0.58	0.65	0.56	0.44
19	0.52	0.58	0.76	0.73	0.67	0.32	0.33	1.3	0.62	0.65	0.53	0.46
20	0.52	0.60	0.77	0.78	0.68	0.42	0.26	0.99	0.62	0.65	0.53	0.40
21	0.49	0.93	0.82	0.78	0.71	0.28	0.35	1.1	0.67	0.64	0.58	0.38
22	0.46	1.00	0.81	0.79	0.70	0.26	0.35	0.93	0.67	0.64	0.59	0.37
23	0.42	1.00	0.82	0.79	0.75	0.10	0.40	0.53	0.71	0.64	0.58	0.39
24	0.41	0.77	0.84	0.79	0.84	0.29	0.44	0.53	0.77	0.64	0.56	0.48
25	0.41	0.82	0.60	0.79	0.72	0.37	0.35	0.99	0.88	0.64	0.54	0.50
26	0.32	0.70	0.83	0.79	0.69	0.09	0.49	1.20	0.88	0.63	0.54	0.52
27	0.26	0.74	0.82	0.79	0.69	0.20	0.31	0.99	0.77	0.63	0.56	0.51
28	0.37	0.72	0.81	0.79	0.80	0.04	0.35	0.58	0.67	0.63	0.58	0.43
29	0.36	0.72	0.80	0.80		0.02	0.44	0.58	0.67	0.62	1.0	0.43
30	0.35	0.69	0.78	0.80		0.02	0.49	0.62	0.67	0.57	1.3	0.42
31	0.37		0.76	0.80		0.21		0.58		0.66	0.66	
TOTAL*	16.59	23.15	22.93	23.80	22.36	15.54	11.94	21.14	20.92	21.00	20.46	15.54

WATER YEAR TOTAL - 235.35 MEAN - 0.64

*CFS - Days

Preliminary Record

DISCHARGE IN CFS, WATER YEAR 1984 MEAN VALUES FOR 9306042

PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	0.41	0.42										
2	0.49	0.36										
3	0.53	0.44										
4	0.53											
5	0.52											
6	0.47											
7	0.46											
8	0.41											
9	0.40											
10	0.39											
11	0.38											
12	0.37											
13	0.32											
14	0.49											
15	0.43											
16	0.38											
17	0.33											
18	0.27											
19	0.26											
20	0.30											
21	0.29											
22	0.28											
23	0.32											
24	0.26											
25	0.26											
26	0.21											
27	0.24											
28	0.23											
29	0.22											
30	0.19											
31	0.34											
TOTAL*	10.98	1.22										

WATER YEAR TOTAL MEAN

*CFS - days

Preliminary Record

DISCHARGE IN CFS, WATER YEAR 1983 MEAN VALUES FOR 9306052

SCANDARD GULCH AT MOUTH NEAR RIO BLANCO, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.94	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.58	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.0
23	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL*	0.0	0.0	0.0	0.0	2.9	10.62	0.0	0.0	0.0	0.19	0.0	0.0

WATER YEAR TOTAL - 13.71   MEAN - 0.04

*CFS - Days

Preliminary Record

DISCHARGE IN CFS, WATER YEAR 1983 MEAN VALUES FOR 9306058

WILLOW CREEK NEAR RIO BLANCO, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	1.2	1.2	1.1	1.2	1.8	5.5	2.8	4.6	3.1	11.0	14.0	3.6
2	1.2	1.2	1.1	1.2	1.8	7.9	2.6	4.7	6.6	12.0	14.0	4.3
3	1.2	1.2	1.1	1.2	1.8	3.9	2.8	4.1	8.7	13.0	14.0	4.4
4	1.1	1.2	1.0	1.2	1.8	3.4	2.6	3.9	6.6	13.0	14.0	4.5
5	1.1	1.2	1.0	1.2	1.8	2.9	2.6	3.9	5.8	11.0	13.0	4.3
6	1.1	1.2	1.0	1.2	1.8	3.3	2.5	4.0	5.6	11.0	13.0	5.4
7	1.1	1.2	1.0	1.2	1.8	2.8	2.6	4.0	4.4	12.0	13.0	5.8
8	1.1	1.2	1.0	1.2	1.8	3.4	2.9	4.4	4.3	12.0	12.0	6.8
9	1.1	1.2	1.0	1.2	1.9	3.7	3.0	4.6	4.1	11.0	12.0	6.4
10	1.1	1.2	1.0	1.2	1.9	3.9	2.9	4.6	5.1	12.0	12.0	4.2
11	1.1	1.3	1.0	1.2	1.9	4.4	3.0	4.7	6.0	12.0	12.0	4.1
12	1.1	1.2	1.0	1.1	1.9	3.2	3.2	4.7	6.7	12.0	13.0	4.2
13	1.1	1.3	1.0	1.3	1.9	2.8	2.9	4.7	5.8	11.0	10.0	3.7
14	1.1	1.3	1.0	1.3	2.0	2.9	3.0	4.4	5.8	11.0	8.3	4.0
15	1.1	1.3	1.0	1.5	2.0	2.9	2.9	2.4	6.9	9.4	6.8	4.4
16	1.1	1.3	1.0	1.6	2.0	2.8	2.8	2.4	11.0	8.1	5.7	4.7
17	1.1	1.3	1.0	1.7	2.1	2.9	2.8	2.4	12.0	7.9	6.3	4.6
18	1.1	1.2	1.0	1.7	2.1	2.9	2.9	2.2	10.0	7.5	7.0	5.0
19	1.1	1.3	1.0	1.6	2.1	2.8	3.2	1.8	7.7	6.8	3.5	6.4
20	1.1	1.2	1.0	1.5	2.1	2.8	3.2	1.5	7.6	8.1	1.0	6.5
21	1.1	1.2	1.1	1.5	2.1	3.0	3.2	1.4	7.6	9.1	1.1	6.2
22	1.1	1.2	1.1	1.5	2.3	2.8	3.2	1.1	7.4	13.0	1.9	7.6
23	1.1	1.1	1.1	1.5	3.0	2.8	3.0	1.1	7.8	10.0	2.4	9.5
24	1.1	1.1	1.1	1.6	3.4	2.8	3.0	1.7	8.8	10.0	2.2	9.4
25	1.1	1.1	1.1	1.7	3.8	2.8	3.0	2.6	10.0	12.0	1.9	8.7
26	1.2	1.1	1.1	1.7	2.7	2.8	3.0	2.7	10.0	13.0	1.6	8.7
27	1.3	1.1	1.2	1.7	2.7	2.8	2.8	2.4	9.9	13.0	1.8	8.8
28	1.2	1.1	1.2	1.7	3.6	2.9	2.5	2.7	10.0	13.0	1.8	8.4
29	1.2	1.1	1.2	1.7		2.8	3.3	2.7	10.0	13.0	2.8	8.3
30	1.2	1.1	1.2	1.7		2.6	4.0	2.8	10.0	13.0	1.9	8.3
31	1.2		1.2	1.7		2.8		2.8		13.0	2.8	0.0
TOTAL*	35.1	35.9	32.9	44.5	61.9	102.0	88.6	98.0	225.3	343.9	226.8	181.2

WATER YEAR TOTAL - 1476.1 MEAN - 4.04

*CFS - Days

Preliminary Record

DISCHARGE IN CFS, WATER YEAR 1984 MEAN VALUES FOR 9306058

WILLOW CREEK NEAR RIO BLANCO, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	8.3	6.1										
2	8.6	6.1										
3	8.8	6.0										
4	8.7	6.0										
5	8.4	6.1										
6	8.5	5.9										
7	8.2	5.8										
8	7.8											
9	7.7											
10	7.6											
11	7.5											
12	7.3											
13	7.4											
14	7.9											
15	7.3											
16	7.1											
17	6.9											
18	7.1											
19	6.9											
20	6.9											
21	6.7											
22	6.7											
23	6.5											
24	6.4											
25	6.4											
26	6.4											
27	6.3											
28	6.2											
29	6.2											
30	6.2											
31	6.1											
TOTAL*	225.0											

WATER YEAR TOTAL MEAN

*CFS - Days

Preliminary Record

DISCHARGE IN CFS, WATER YEAR 1983 MEAN VALUES FOR 9306061

PICEANCE CREEK ABOVE HUNTER CREEK NEAR RIO BLANCO, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	19.0	16.0	15.0	9.5	12.0	23.0	26.0	140.0	280.0	58.0	50.0	48.0
2	17.0	16.0	15.0	9.5	13.0	33.0	25.0	147.0	265.0	55.0	53.0	49.0
3	16.0	15.0	14.0	9.5	12.0	24.0	25.0	149.0	245.0	54.0	52.0	48.0
4	15.0	14.0	13.0	12.0	12.5	21.0	24.0	149.0	225.0	54.0	50.0	53.0
5	15.0	14.0	14.0	12.0	13.0	21.0	23.0	151.0	210.0	54.0	50.0	53.0
6	16.0	14.0	15.0	12.0	12.0	24.0	21.0	163.0	190.0	52.0	48.0	51.0
7	15.0	14.0	14.0	12.0	12.5	20.0	20.0	175.0	180.0	48.0	46.0	50.0
8	15.0	14.0	14.0	12.0	13.0	19.0	21.0	180.0	165.0	47.0	48.0	49.0
9	15.0	14.0	15.0	13.0	12.0	20.0	23.0	182.0	155.0	46.0	52.0	49.0
10	15.0	15.0	15.0	13.0	12.0	23.0	23.0	212.0	145.0	46.0	50.0	47.0
11	15.0	17.0	15.0	13.0	12.0	35.0	24.0	250.0	137.0	46.0	56.0	46.0
12	15.0	15.0	14.0	12.5	11.0	35.0	26.0	240.0	139.0	45.0	70.0	46.0
13	15.0	14.0	13.0	12.5	12.0	34.0	26.0	220.0	140.0	44.0	78.0	47.0
14	15.0	14.0	12.0	12.0	12.0	40.0	24.0	210.0	130.0	44.0	64.0	46.0
15	14.0	14.0	12.0	12.0	12.0	43.0	23.0	210.0	120.0	44.0	60.0	45.0
16	14.0	16.0	12.0	12.0	12.0	34.0	24.0	210.0	110.0	45.0	62.0	44.0
17	14.0	14.0	13.0	12.0	12.0	33.0	25.0	220.0	110.0	46.0	62.0	43.0
18	14.0	15.0	13.0	12.0	12.0	30.0	31.0	210.0	96.0	46.0	64.0	43.0
19	13.0	15.0	13.0	12.0	13.0	28.0	55.0	230.0	90.0	45.0	65.0	44.0
20	13.0	14.0	12.0	12.0	12.0	26.0	67.0	240.0	85.0	44.0	64.0	45.0
21	12.0	15.0	12.0	12.0	12.0	24.0	86.0	240.0	81.0	48.0	62.0	44.0
22	12.0	16.0	13.0	11.0	12.0	24.0	103.0	280.0	76.0	53.0	60.0	44.0
23	12.0	14.0	14.0	11.0	14.0	25.0	82.0	320.0	75.0	57.0	58.0	45.0
24	12.0	15.0	12.0	12.0	19.0	24.0	102.0	345.0	78.0	54.0	55.0	46.0
25	13.0	15.0	8.9	12.0	20.0	23.0	124.0	355.0	78.0	52.0	50.0	46.0
26	13.0	15.0	9.0	12.0	18.0	23.0	124.0	360.0	82.0	60.0	47.0	45.0
27	15.0	14.0	9.0	12.0	16.0	22.0	110.0	365.0	80.0	64.0	43.0	44.0
28	15.0	15.0	9.9	12.0	19.0	23.0	102.0	350.0	72.0	60.0	50.0	43.0
29	14.0	14.0	9.2	13.0		22.0	97.0	340.0	66.0	56.0	70.0	43.0
30	15.0	15.0	9.5	12.0		21.0	112.0	320.0	61.0	50.0	50.0	44.0
31	15.0		9.5	12.0		24.0		300.0		48.0	44.0	
TOTAL*	448.0	442.0	389.0	367.5	374.0	821.0	1598.0	7463.0	3956.0	1565.0	1733.0	1390.0

WATER YEAR TOTAL - 20546.50 MEAN - 56.79

*CFS -Days

Preliminary Record

DISCHARGE IN CFS, WATER YEAR 1984 MEAN VALUES FOR 9306061

PICEANCE CREEK ABOVE HUNTER CREEK NEAR RIO BLANCO, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	44.0	35.0										
2	46.0	35.0										
3	47.0	35.0										
4	46.0											
5	44.0											
6	43.5											
7	42.5											
8	42.0											
9	41.0											
10	41.0											
11	41.0											
12	39.5											
13	40.5											
14	43.0											
15	43.5											
16	42.0											
17	40.0											
18	40.0											
19	40.0											
20	40.0											
21	40.0											
22	40.0											
23	39.0											
24	38.0											
25	38.5											
26	39.0											
27	38.0											
28	38.0											
29	37.0											
30	37.0											
31	36.0											
TOTAL*	1267.0	105.0										
WATER YEAR TOTAL				MEAN								

*CFS - Days

Preliminary Record

DISCHARGE IN CFS, WATER YEAR 1983 MEAN VALUES FOR 9306175

BLACK SULPHUR CREEK NEAR RIO BLANCO, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	9.1	8.5	6.5	2.9	4.1	13.0	7.0	23.0	132.0	23.0	19.0	14.0
2	9.0	8.4	5.3	3.2	3.9	17.0	6.6	20.0	121.0	22.0	19.0	14.0
3	8.9	7.9	5.1	3.4	3.6	11.0	7.5	19.0	112.0	21.0	19.0	13.0
4	8.0	7.1	5.1	3.6	3.9	9.0	7.3	31.0	104.0	20.0	19.0	14.0
5	8.0	7.0	5.2	5.1	4.1	12.0	6.9	36.0	94.0	20.0	20.0	13.0
6	9.0	7.1	5.2	5.9	3.7	12.0	6.7	43.0	88.0	19.0	20.0	12.0
7	9.0	7.4	5.3	5.1	4.0	8.8	7.0	65.0	87.0	19.0	20.0	12.0
8	8.8	7.5	5.3	4.7	3.9	7.4	7.4	63.0	75.0	18.0	20.0	13.0
9	9.1	7.4	4.9	4.5	3.9	7.2	8.2	67.0	71.0	17.0	20.0	12.0
10	8.7	6.7	5.3	4.3	3.9	8.7	7.6	78.0	73.0	16.0	20.0	12.0
11	8.4	7.1	5.3	4.5	4.0	9.4	7.4	87.0	71.0	16.0	28.0	12.0
12	8.6	6.8	5.0	4.6	4.1	7.1	7.2	92.0	77.0	15.0	39.0	12.0
13	8.8	6.6	4.8	4.5	4.6	6.0	6.9	91.0	71.0	14.0	28.0	12.0
14	8.5	6.3	5.2	4.4	4.7	5.8	6.7	80.0	61.0	14.0	24.0	12.0
15	8.3	6.0	4.5	4.5	4.4	5.9	7.2	76.0	51.0	13.0	23.0	12.0
16	8.2	6.1	5.2	4.5	4.6	5.7	7.4	73.0	45.0	13.0	22.0	12.0
17	8.0	6.3	5.2	4.4	4.5	5.9	7.5	85.0	40.0	13.0	21.0	11.0
18	7.7	6.3	4.9	4.2	4.6	6.1	7.6	82.0	37.0	14.0	21.0	11.0
19	7.8	6.2	4.7	4.0	4.6	5.7	7.6	82.0	35.0	14.0	20.0	11.0
20	7.6	6.1	4.9	4.1	4.5	5.4	8.5	77.0	34.0	14.0	20.0	11.0
21	7.5	6.2	5.2	4.2	4.1	5.4	10.0	81.0	32.0	14.0	19.0	11.0
22	7.8	5.9	4.7	4.1	4.5	5.7	11.0	95.0	30.0	25.0	19.0	11.0
23	7.8	5.7	4.7	4.0	5.7	5.5	11.0	107.0	29.0	60.0	19.0	12.0
24	7.4	4.6	4.3	4.0	10.0	5.3	12.0	112.0	26.0	20.0	19.0	12.0
25	7.2	5.9	2.8	4.1	12.0	5.3	15.0	128.0	43.0	38.0	18.0	11.0
26	7.2	5.7	1.8	4.1	10.0	5.3	17.0	152.0	38.0	19.0	18.0	11.0
27	8.9	6.0	2.4	4.1	7.9	5.4	17.0	154.0	29.0	19.0	18.0	11.0
28	8.8	5.9	2.6	4.1	10.0	5.6	17.0	159.0	25.0	18.0	18.0	11.0
29	8.3	5.4	2.3	4.2		6.1	17.0	157.0	24.0	19.0	41.0	10.0
30	8.7	5.6	2.5	4.2		6.3	18.0	150.0	23.0	19.0	15.0	10.0
31	8.6		2.7	4.1		6.9		140.0		19.0	14.0	
TOTAL*	257.7	195.7	138.9	131.6	147.8	231.90	291.2	2705.0	1778.0	605.0	660.0	355.0

WATER YEAR TOTAL - 7497.8 MEAN - 20.54

*CFS - [illegible]

Preliminary Record

DISCHARGE IN CFS, WATER YEAR 1983 MEAN VALUES FOR 9306200

PICEANCE CREEK BELOW RYAN GULCH NEAR RIO BLANCO, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	30.0	25.0	23.0	18.0	14.0	42.0	31.0	144.0	361.0	91.0	71.0	72.0
2	30.0	25.0	21.0	18.0	15.0	47.0	30.0	147.0	320.0	82.0	73.0	71.0
3	27.0	24.0	20.0	19.0	14.0	38.0	32.0	149.0	304.0	81.0	72.0	69.0
4	25.0	24.0	20.0	20.0	15.0	29.0	31.0	150.0	265.0	82.0	71.0	73.0
5	25.0	23.0	21.0	21.0	17.0	31.0	30.0	152.0	239.0	81.0	71.0	73.0
6	28.0	24.0	21.0	21.0	14.0	31.0	28.0	160.0	218.0	77.0	70.0	71.0
7	26.0	24.0	21.0	22.0	16.0	30.0	28.0	179.0	203.0	69.0	68.0	69.0
8	26.0	24.0	21.0	22.0	15.0	26.0	30.0	183.0	182.0	68.0	66.0	67.0
9	26.0	24.0	20.0	21.0	15.0	27.0	32.0	183.0	174.0	65.0	70.0	65.0
10	26.0	24.0	21.0	21.0	14.0	28.0	32.0	215.0	171.0	59.0	67.0	63.0
11	25.0	26.0	21.0	21.0	14.0	35.0	32.0	265.0	163.0	60.0	68.0	61.0
12	25.0	25.0	20.0	20.0	14.0	40.0	34.0	298.0	176.0	59.0	102.0	61.0
13	26.0	24.0	20.0	20.0	14.0	38.0	34.0	277.0	186.0	56.0	122.0	60.0
14	25.0	24.0	20.0	20.0	14.0	42.0	32.0	255.0	160.0	55.0	103.0	59.0
15	24.0	22.0	20.0	19.0	15.0	47.0	32.0	249.0	149.0	50.0	93.0	59.0
16	23.0	22.0	20.0	19.0	16.0	42.0	33.0	250.0	144.0	48.0	89.0	59.0
17	23.0	23.0	20.0	19.0	16.0	38.0	34.0	274.0	141.0	48.0	89.0	58.0
18	22.0	23.0	20.0	18.0	16.0	37.0	38.0	246.0	131.0	53.0	91.0	56.0
19	23.0	24.0	21.0	18.0	17.0	34.0	54.0	270.0	116.0	55.0	92.0	57.0
20	23.0	23.0	20.0	17.0	17.0	32.0	65.0	287.0	112.0	53.0	90.0	57.0
21	22.0	23.0	20.0	16.0	16.0	30.0	75.0	277.0	106.0	52.0	88.0	58.0
22	23.0	23.0	20.0	16.0	17.0	30.0	91.0	311.0	98.0	67.0	86.0	57.0
23	23.0	24.0	20.0	17.0	19.0	30.0	84.0	345.0	95.0	124.0	80.0	60.0
24	22.0	25.0	20.0	16.0	30.0	29.0	89.0	382.0	94.0	71.0	75.0	60.0
25	22.0	26.0	19.0	17.0	32.0	28.0	103.0	431.0	104.0	97.0	74.0	58.0
26	22.0	22.0	20.0	16.0	28.0	28.0	118.0	461.0	127.0	70.0	72.0	57.0
27	25.0	21.0	14.0	16.0	22.0	27.0	118.0	464.0	129.0	86.0	71.0	56.0
28	24.0	21.0	15.0	16.0	25.0	27.0	111.0	462.0	110.0	73.0	69.0	55.0
29	23.0	22.0	15.0	15.0		28.0	108.0	447.0	101.0	72.0	107.0	54.0
30	23.0	22.0	16.0	15.0		27.0	116.0	425.0	98.0	71.0	91.0	54.0
31	24.0		17.0	15.0		30.0		396.0		68.0	74.0	
TOTAL*	761.0	706.0	607.0	569.0	491.0	1028.0	1705.0	8734.0	4977.0	2143.0	2525.0	1849.0

WATER YEAR TOTAL - 26095.0 MEAN - 71.49

*CFS - Days

Preliminary Record

DISCHARGE IN CFS, WATER YEAR 1984 MEAN VALUES FOR 9306200

PICEANCE CREEK BELOW RYAN GULCH NEAR RIO BLANCO, CO

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1	55.0	48.0										
2	60.0	48.0										
3	61.0	48.0										
4	59.0	48.0										
5	55.0	48.0										
6	54.0	48.0										
7	53.0	48.0										
8	52.0											
9	50.0											
10	50.0											
11	50.0											
12	49.0											
13	51.0											
14	55.0											
15	56.0											
16	54.0											
17	52.0											
18	52.0											
19	52.0											
20	52.0											
21	52.0											
22	52.0											
23	51.0											
24	50.0											
25	50.0											
26	51.0											
27	51.0											
28	50.0											
29	50.0											
30	49.0											
31	49.0											
TOTAL*	1627.0	336.0										
WATER YEAR TOTAL				MEAN								

*CFS - Days

Preliminary Record

1.2.1.2 Springs and Seeps

Flow and field measurement data were sampled at 22 springs and 1 seep during June through November 1983 and are presented in this section in tabular and plot form. Monitoring of these springs are required by the Interim Monitoring Program (IMP) and the Water Augmentation Plan (WAP); see Table 1.2-1. The IMP sampling requirements include flows and field measurements (temperature, pH conductivity and field fluoride) taken monthly at five springs (WS04, WS06, WS07, WS12 and WS13) and remaining springs, WS01, WS02, WS03, WS08, WS09, WS10, WS66, and seep WS11 if not diverted for seasonal irrigation; refer to Figure 1.2.1.2-1 for location. Nine springs located around the outer boundaries of C-b Tract can be referenced on Figure 1.2-1 (jacket map). These nine springs are monitored by the State of Colorado Division of Water Resources.

Tables 1.2.1.2-1 through 1.2.1.2-3 consist of data sampled during this report period for C-b Tract springs of flow and field measurements and flow of off-tract springs.

Time series plots of flow data from 28 springs and 1 seep are presented to display a historical picture of spring flow activities since 1979 through November 1983. See Table 1.2.1.2-4 for the page number of each spring plot.

Table 1.2-1 lists water stations and sampling schedule during the interim period.

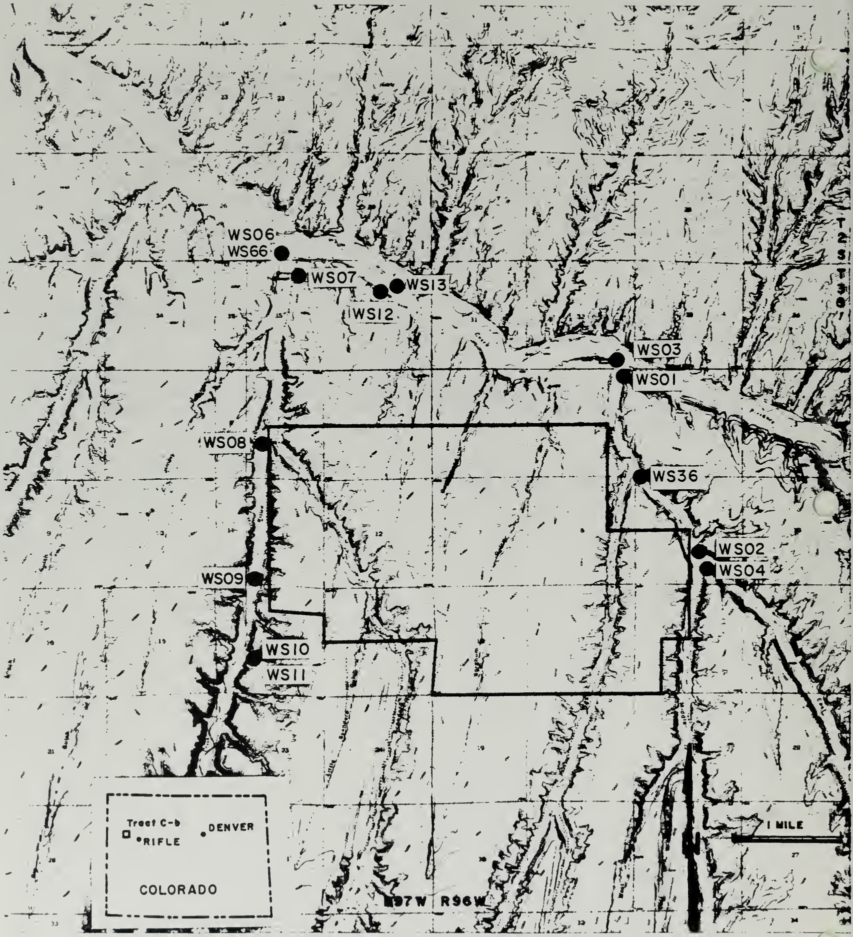

WS06
WS66
WS07
WS13
WS12
WS03
WS01
WS08
WS36
WS02
WS04
WS09
WS10
WS11
T2S
T3S
Tract C-b
RIFLE
DENVER
COLORADO
1 MILE
R97W
R96W

Figure I.2.1.2-1 NEAR-TRACT SPRINGS AND SEEPS MONITORING NETWORK

TABLE 1.2.1.2-1

CB-TRACT
WATER FLOW AND FIELD MEASUREMENTS
SPRINGS AND SEEPS
FOR SAMPLE DATE SHOWN

SPRING	YR	MO	DY	ST	FLOW (CFS)	WATER TEMP (C)	PH	FIELD FLUOIRDE (MG/L)	SPEC COND (UMHOS)
WS01	83	6	20	DRY	.00				
		7	14		.76	18.0	7.8		1400.0
		8	18		1.55	11.0	7.8		1340.0
		9	19		-4.00	9.0	7.7		1370.0
		10	26		-4.00	8.5	7.7		1390.0
		11	30		4.10	8.0	7.9		1330.0
WS02	83	6	20		-.03	12.5	7.7		1050.0
		7	11		.05	11.0	7.7		1210.0
		8	18		.12	11.0	7.8		1270.0
		9	19	INACSS		9.0	7.8		1190.0
		10	26		1.38	8.0	8.1		1220.0
		11	30		.13	8.0	7.9		1190.0
WS03	83	6	20		3.17	14.5	7.7		1220.0
		7	14		.66	11.0	7.8		1380.0
		8	18		9.54	10.0	7.6		1450.0
		9	19	INACSS		9.0	7.6		1420.0
		10	26		3.70	9.0	7.8		1410.0
		11	30		1.40	8.5	7.7		1410.0
WS04	83	6	20		.28	10.0	7.8		1000.0
		7	11		.73	15.0	7.8		1250.0
		8	18		-3.00	12.0	7.8		1280.0
		9	19	INACSS		9.0	7.8		1220.0
		10	26		.99	7.5	7.9		1240.0
WS06	83	6	20	INACSS	.00	15.5	7.8		1260.0
		7	14		-4.62	13.0	7.7		1450.0
		8	18		1.66	10.5	7.4		1590.0
		9	19	INACSS		10.0	7.5		1440.0
		10	26	INACSS		9.5	9.0		1410.0
		11	30		.61	8.5	7.5		1420.0
WS07	83	6	20	INACSS		12.0	7.5		1250.0
		7	14			10.0	7.5	.8	1380.0
		8	18			9.0	7.5		1470.0
		9	19			9.0	7.5	.5	1470.0

DRY = SPRING DRY
NOFLME = NO FLUME
- = LESS THAN
DIVERT = FLOW DIVERTED FOR IRRIGATION

TABLE 1.2.1.2-1 (cont'd)

CB-TRACT
WATER FLOW AND FIELD MEASUREMENTS
SPRINGS AND SEEPS
FOR SAMPLE DATE SHOWN

SPRING	YR	MO	DY	ST	FLOW (CFS)	WATER TEMP (C)	PH	FIELD FLUOIRDE (MG/L)	SPEC COND (UMHOS)
WS07	83	10	26		-.36	8.5	7.6	.5	1440.0
WS08	83	6	20		.80	10.0	7.5		1240.0
		7	14		.73	10.0	7.6		1250.0
		8	18		.28	10.0	7.6		1390.0
		9	19		-.05	10.0	7.7		1310.0
		10	26		-.05	10.0	7.7		1330.0
		11	30	DRY					
WS09	83	6	20		.28	11.0	7.6		1270.0
		7	14		.24	10.0	7.5		1380.0
		8	18		.82	9.0	7.4		1420.0
		9	19		.18	9.0	7.5		1350.0
		10	26		.15	10.0	7.8		1360.0
		11	30		.16	8.0	7.6		1370.0
WS10	83	6	20		.97	18.5	7.9		1110.0
		7	14		.92	11.0	7.7		1300.0
		8	18		.79	9.0	7.4		1290.0
		9	19		.97	7.0	7.6		1280.0
		10	26		.60	10.5	7.8		1270.0
		11	30		.52	7.0	8.0		1300.0
WS11	83	6	20		-.99	12.5	7.6		1220.0
		7	14		.89	9.0	7.7		1300.0
		8	18		-7.00	11.0	7.7		1330.0
		9	19			7.5	7.6		1280.0
		10	26		.53	9.0	7.7		1290.0
		11	30		.44	7.5	7.7		1300.0
WS12	83	6	23		.31	12.0	7.7	6.5	1570.0
		7	14		.31	14.0	7.8	7.1	1650.0
		8	18		.31	11.0	7.8	7.0	1570.0
		9	19		.28	9.0	7.5	7.5	1780.0
		10	26		.31	10.0	8.1	7.5	1510.0
		11	30		.26	9.5	8.0		1675.0
WS13	83	6	23		.32	10.0	7.6	6.7	1570.0

DRY = SPRING DRY
NOFLME = NO FLUME
- = LESS THAN
DIVERT = FLOW DIVERTED FOR IRRIGATION

TABLE 1.2.1.2-1 (cont'd)

CB-TRACT
WATER FLOW AND FIELD MEASUREMENTS
SPRINGS AND SEEPS
FOR SAMPLE DATE SHOWN

SPRING	YR	MO	DY	ST	FLOW (CFS)	WATER TEMP (C)	PH	FIELD FLUOIRDE (MG/L)	SPEC COND (UMHOS)
WS13	83	7	14		.30	10.0	7.8	7.8	1600.0
		8	18		.34	9.5	7.6	8.0	1550.0
		9	19		.29	9.0	7.8	7.3	1540.0
		10	26		.29	9.5	7.7	7.4	1620.0
		11	30		.30	10.0	7.7		1510.0

DRY = SPRING DRY
NOFLME = NO FLUME
- = LESS THAN
DIVERT = FLOW DIVERTED FOR IRRIGATION

TABLE 1.2.1.2-2

CB-TRACT
WATER FLOW REQUIRED BY MAP
SPRINGS AND SEEPS
FOR SAMPLE DATE SHOWN

SPRING	YR	MO	DY	ST	FLOW (CFS)
WS21	83	6	28		.97
		8	29	INACSS	.00
		10	24	INACSS	.00
WS22	83	6	28		.60
		8	28		.32
			29		.34
		10	24		.34
WS23	83	8	29		2.03
			31		1.59
		9	29		3.51
		10	24	INACSS	.00
WS26	83	6	29		.34
		8	29		.34
			31		.29
		10	25		.28
WS28	83	8	31	INACSS	.00
		9	29		1.62
		10	25	INACSS	.00
WS30	83	7	19	NORTH	.46
				SOUTH	-13.50
		11	6	NORTH	.42
				SOUTH	6.10
WS31	83	6	29		1.46
		8	31	INACSS	.00
		10	25		4.84
WS34	83	6	29		.99
		10	25		.47
WS36	83	6	20		1.41
		7	11		1.58
		8	18		.31
		9	19		.00
		10	26		5.25

DRY = SPRING DRY
NOFLMF = NO FLUME
- = LESS THAN

TABLE 1.2.1.2-2 (cont'd)

CB-TRACT
WATER FLOW REQUIRED BY WAP
SPRINGS AND SEEPS
FOR SAMPLE DATE SHOWN

SPRING	YR	MO	DY	ST	FLOW (CFS)
WS36	83	11	30		.94
WS66	83	6	20	INACSS	.00
		7	14		-2.40
		8	18		-.05
		9	19	DRY	.00
		10	26	DRY	.00

DRY = SPRING DRY
NOFLME = NO FLUME
- = LESS THAN

TABLE 1.2.1.2-3

CB-TRACT
STEVENS RECORDER WATER FLOW FOR SPRINGS AND SEEPS
FOR SAMPLE DATE SHOWN

YR	MO	DY	WS04 FLOW (CFS)	WS11 FLOW (CFS)	WS12 FLOW (CFS)
83	6	1	.29	.89	
		2	.29	.89	
		3	.29	.89	
		4	.29	.90	
		5	.29	.90	
		6	.30	.92	
		7	.29	.90	
		8	.29	.90	
		9	.31	.90	
		10	.31	.92	
		11	.29	.92	
		12	.34	.92	
		13	.31	.92	
		14	.29	.92	
		15	.29	.84	
		16	.29	.84	
		17	.29	.84	
		18	.29	.85	
		19	.28	.87	
		20	.28	.96	
		21	.28	.96	
		22	.28	.95	
		23	.31	.95	
		24	.37	.95	
		25	-2.75	1.04	
		26	.48	.99	
		27	.39	.99	
		28	.41	.99	
		29	.41	.99	
		30	.41	.99	
	7	1	.41	.99	
		2	.45	.99	
		3	.45	.99	
		4	.47	.99	
		5	.48	.99	
		6	.52	.99	
		7	.52	.99	
		8	.56	1.02	
		9	.60	1.02	
		10	.65	1.02	
		11	.71	1.02	
		12	.73	1.02	
		13	.80	1.02	
		14	.85	1.02	
		15	.89	1.02	
		16	.94	1.02	

- Indicates less than.

CA-TRACT
STEVENS RECORDER WATER FLOW FOR SPRINGS AND SEEPS
FOR SAMPLE DATE SHOWN

YR	MO	DY	WS04 FLOW (CFS)	WS11 FLOW (CFS)	WS12 FLOW (CFS)
83	7	17	.99	1.01	
		18	1.09	1.01	
		19	1.15	1.01	
		20	1.23	1.01	
		21	1.48	1.01	
		22	1.48	1.01	
		23	1.53	1.02	
		24	1.51	1.02	
		25	1.62	1.02	
		26	1.62	1.02	
		27	1.79	1.02	
		28	2.03	.90	.22
		29	2.16	.90	.22
		30	2.23	.90	.22
		31	2.36	.90	.23
	8	1	2.46	.90	.23
		2	2.50	.90	.23
		3	2.57	.90	.23
		4	2.64	.89	.23
		5	2.68	.89	.23
		6	2.71	.89	.25
		7	2.75	.89	.25
		8	2.75	.89	.25
		9	-2.75	.89	.25
		10	-2.75	.89	.25
		11	-2.75	.89	.25
		12	-2.75	.86	.23
		13	-2.75	.86	.23
		14	-2.75	.86	.23
		15	-2.75	.86	.23
		16	-2.75	.85	.25
		17	-2.75	.85	.25
		18	-2.75	.85	.25
		19	-2.75	.86	.25
		20	-2.75	.85	.25
		21	-2.75	.85	.25
		22	-2.75	.85	.25
		23	-2.75	.86	.26
		24	-2.75	.84	.25
		25	-2.75	.84	.26
		26	-2.75	.84	.26
		27	-2.75	.84	.25
		28	-2.75	.83	.25
		29	-2.75	.83	.26
		30	-2.75	.83	.25
		31	-2.75	.83	.25

- Indicates less than.

TABLE 1.2.1.2-3 (cont'd)

Ca-TRACT
STEVENS RECORDER WATER FLOW FOR SPRINGS AND SEEPS
FOR SAMPLE DATE SHOWN

YR	MO	DY	WS04 FLOW (CFS)	WS11 FLOW (CFS)	WS12 FLOW (CFS)
83	9	1	-2.75	.83	.25
		2	-2.75	.83	.26
		3	-2.75	.83	.26
		4	-2.75	.83	.26
		5	-2.75	.83	.26
		6	-2.75	.83	.26
		7	-2.75	.83	.26
		8	-2.75	.83	.26
		9	-2.75	.83	.28
		10	-2.75	.83	.28
		11	-2.75	.83	.28
		12	-2.75	.83	.28
		13	-2.75	.83	.28
		14	-2.75	.72	.29
		15	-2.75	.56	.29
		16	-2.75	.65	.29
		17	-2.75	.65	.29
		18	-2.75	.55	.29
		19	-2.75	.65	.28
		20	-2.75	.55	.28
		21	-2.75	.65	.28
		22	-2.75	.55	.28
		23	-2.75	.55	.28
		24	-2.75	.65	.28
		25	-2.75	.65	.28
		26	-2.75	.55	.28
		27	-2.75	.55	.29
		28	-2.75	.55	.29
		29	-2.75	.53	.29
		30	-2.75	.52	.29
	10	1	-2.75	.52	.29
		2	-2.75	.51	.30
		3	-2.75	.51	.29
		4	-2.75	.53	.29
		5	-2.75	.52	.29
		6	-2.75	.52	.29
		7	-2.75	.51	.29
		8	-2.75	.51	.29
		9	2.14	.51	.29
		10	2.16	.50	.31
		11	2.15	.50	.31
		12	2.14	.50	.32
		13	2.13	.50	.32
		14	2.09	.50	.34
		15	2.05	.49	.34
		16	2.03	.50	.34

- Indicates less than.

TABLE 1.2.1.2-3 (cont'd)

CB-TRACT
STEVENS RECORDER WATER FLOW FOR SPRINGS AND SEEPS
FOR SAMPLE DATE SHOWN

YR	MO	DY	WS04 FLOW (CFS)	WS11 FLOW (CFS)	WS12 FLOW (CFS)
83	10	17	2.03	.58	.34
		18	2.03	.49	.34
		19	2.03	.49	.34
		20		.46	.34
		21		.46	.34
		22		.45	.34
		23		.45	.34
		24		.45	.34
		25		.45	.34
		26	2.03	.45	.32
		27		.45	
		28		.44	

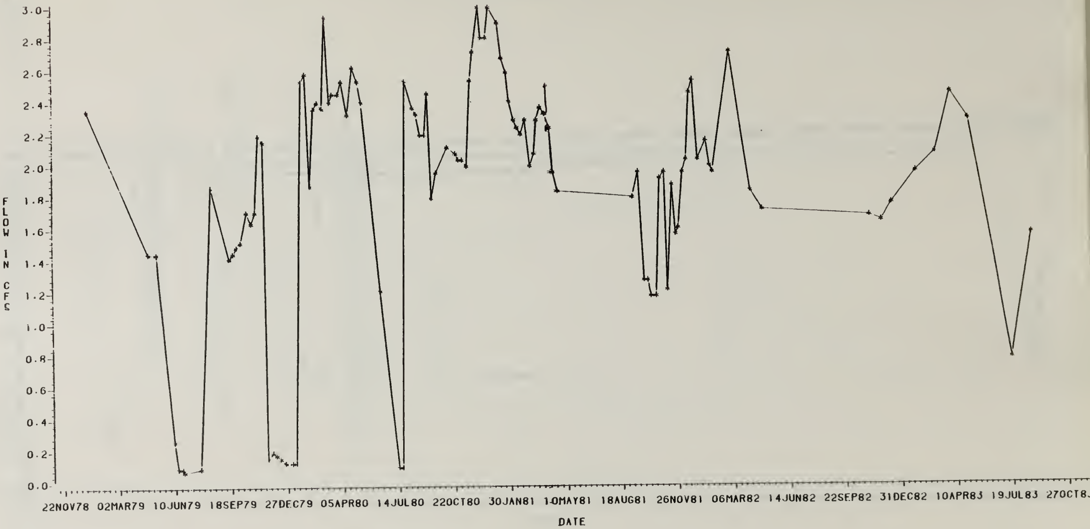
TABLE 1.2.1.2-4

LIST OF SPRING FLOW TIME SERIES PLOTS

Computer Code	Location	Page No.
WS01	CB S-1	I-49
WS02	CB S-2	I-50
WS03	CB S-3	I-51
WS04	CB S-4	I-52
WS06	CB S-6	I-53
WS07	CB S-7	I-54
WS08	CB S-8	I-55
WS09	CB S-9	I-56
WS10	CB S-10	I-57
WS11	CB S-10A (Seep)	I-58
WS12	CB S-102	I-59
WS13	CB S-102A	I-60
WS21	CER-1	I-61
WS22	B-3	I-62
WS23	H-3	I-63
WS24	F-3	I-64
WS25	Figure 4-A	I-65
WS26	W-4	I-66
WS27	W-9	I-67
WS28	CER-7	I-68
WS29	S-9	I-69
WS30	P3 & P3A	I-70
WS31	CER-6	I-71
WS32	W-2 (CB S-9)	I-72
WS33	S-2	I-73
WS34	W-3 (CB S-10)	I-74
WS35	Figure 4	I-75
WS36	CB S-101	I-76
WS37	Oldland Spring	I-77
WS66	CB S-6A	I-78

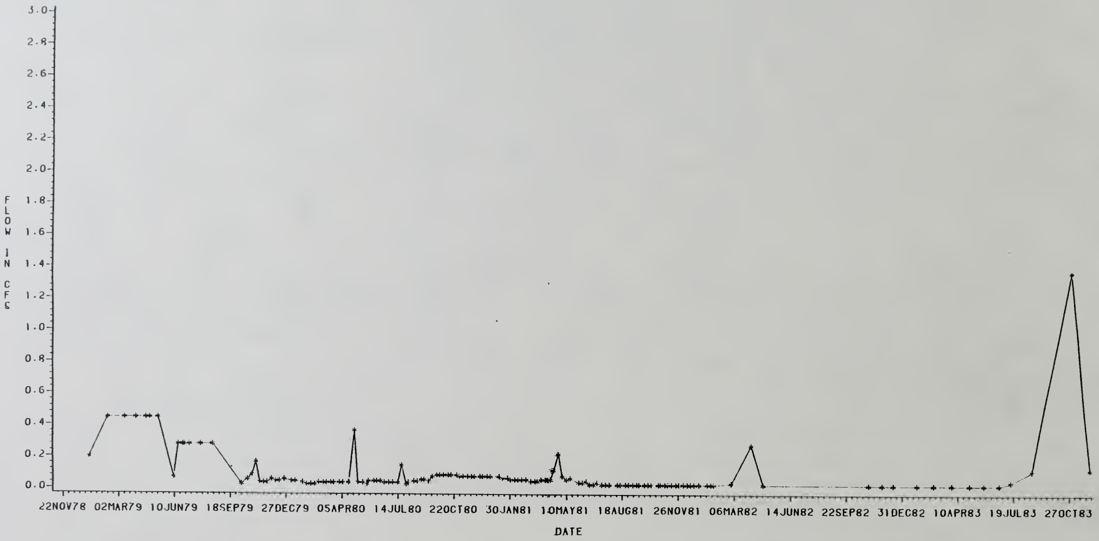
TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS01



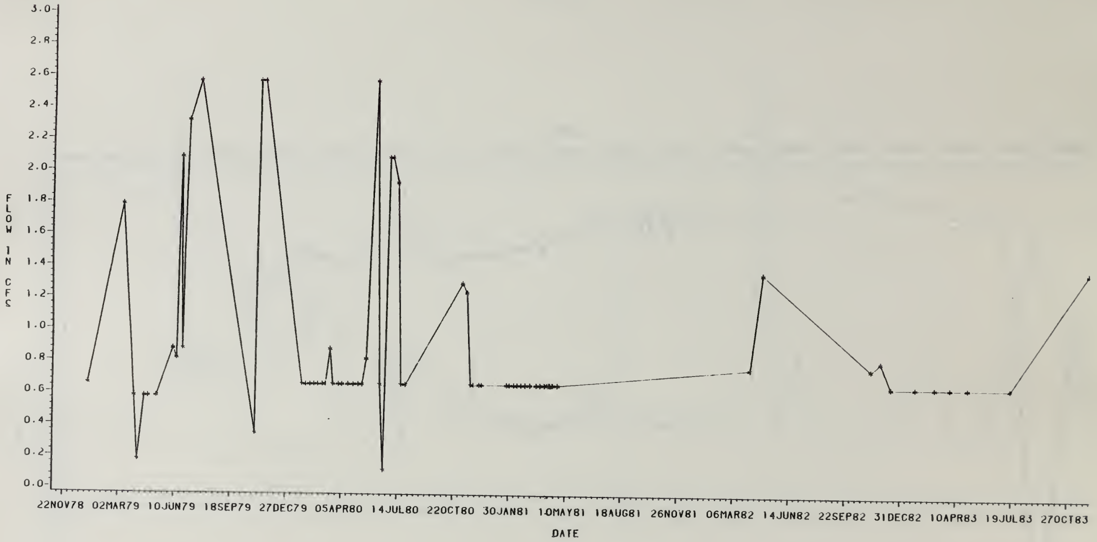
TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS02



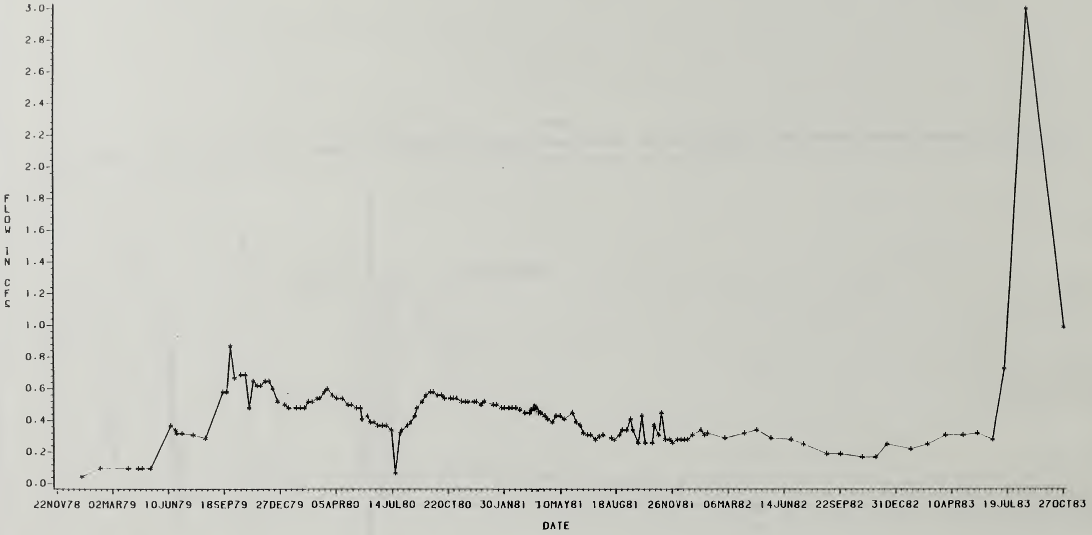
TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS03



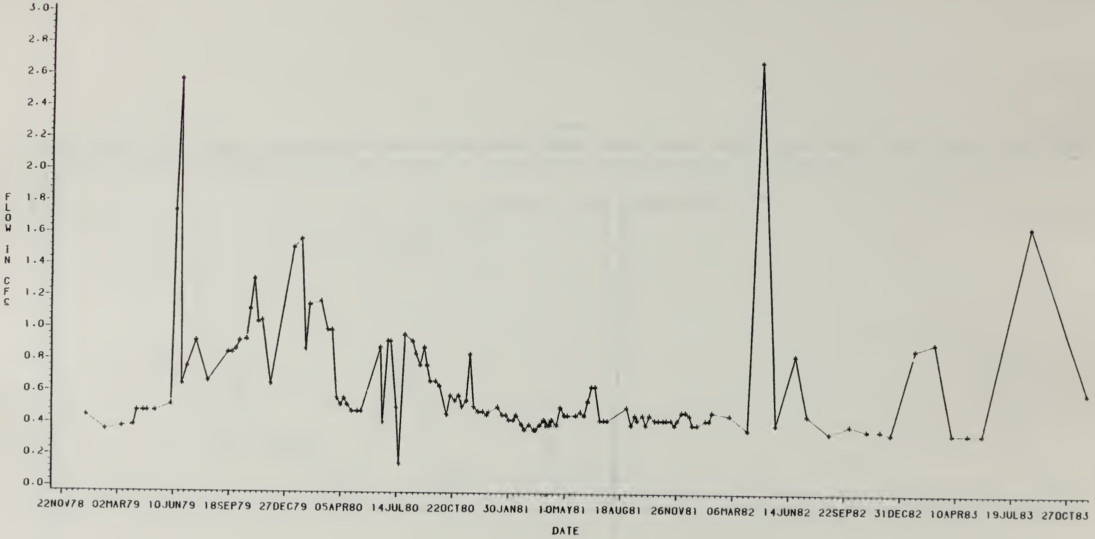
TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS04



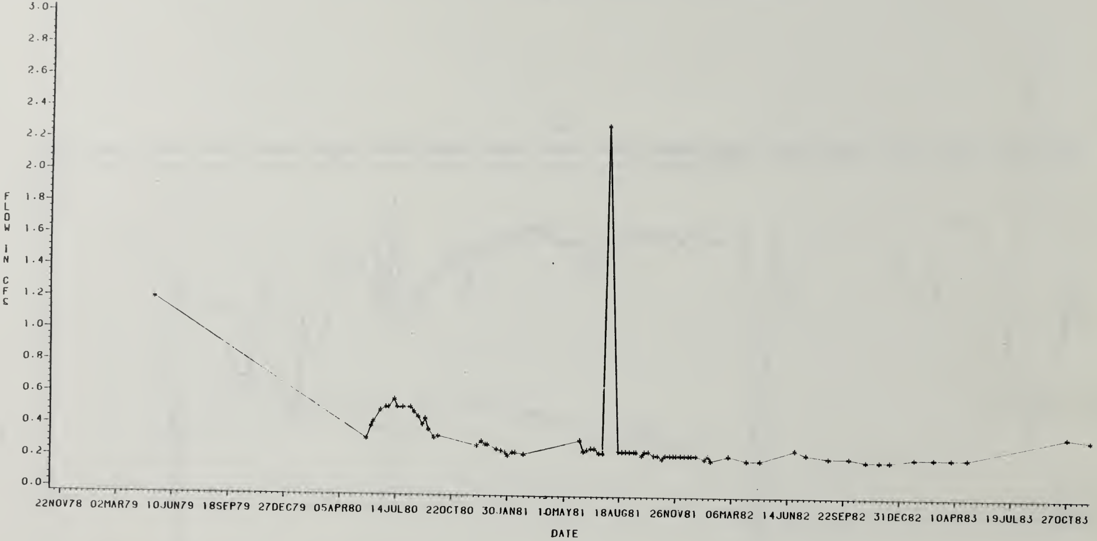
TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOG=WS06



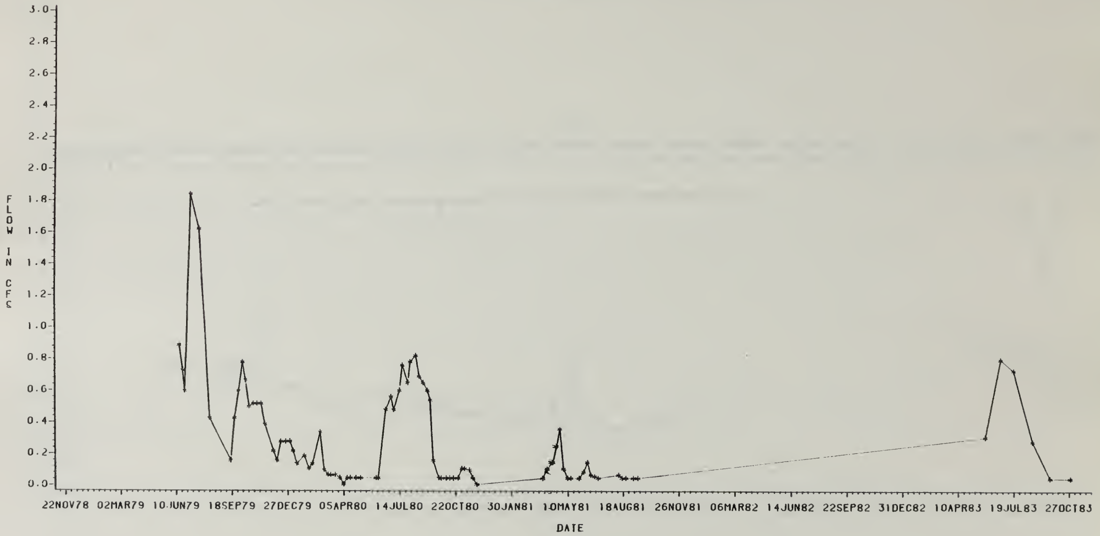
TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS07



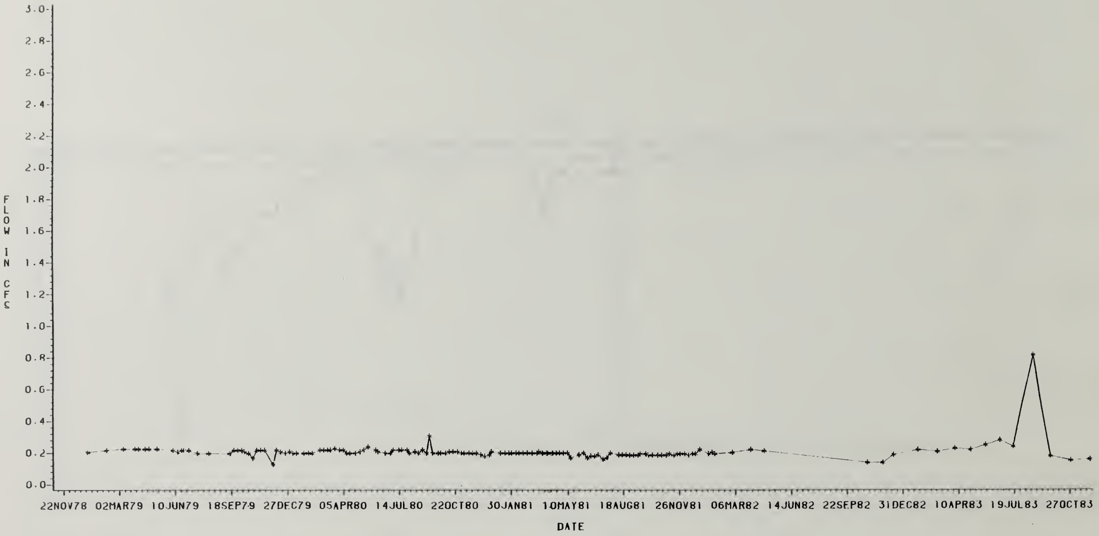
TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOG=WS08



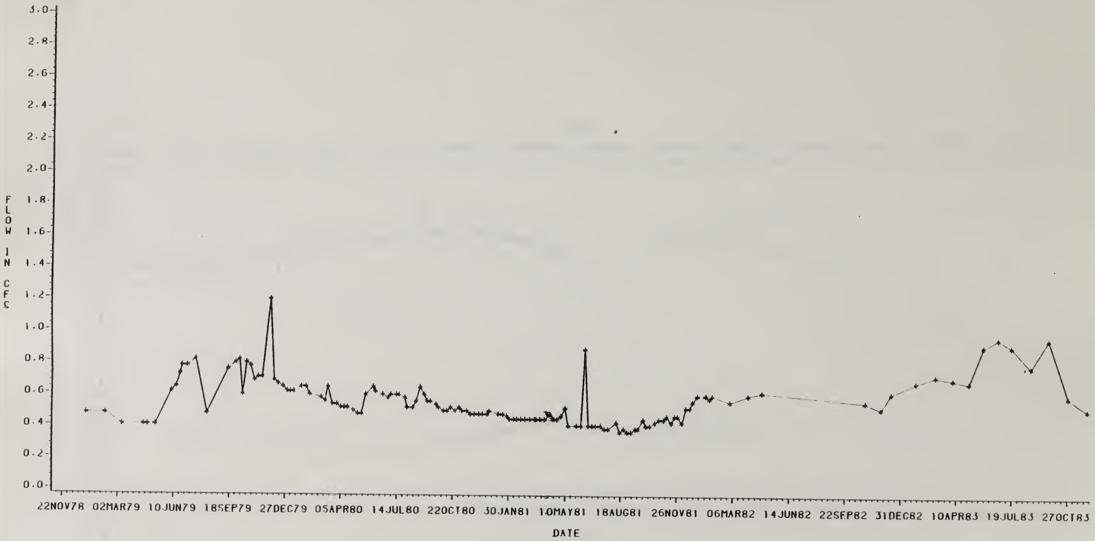
TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS09



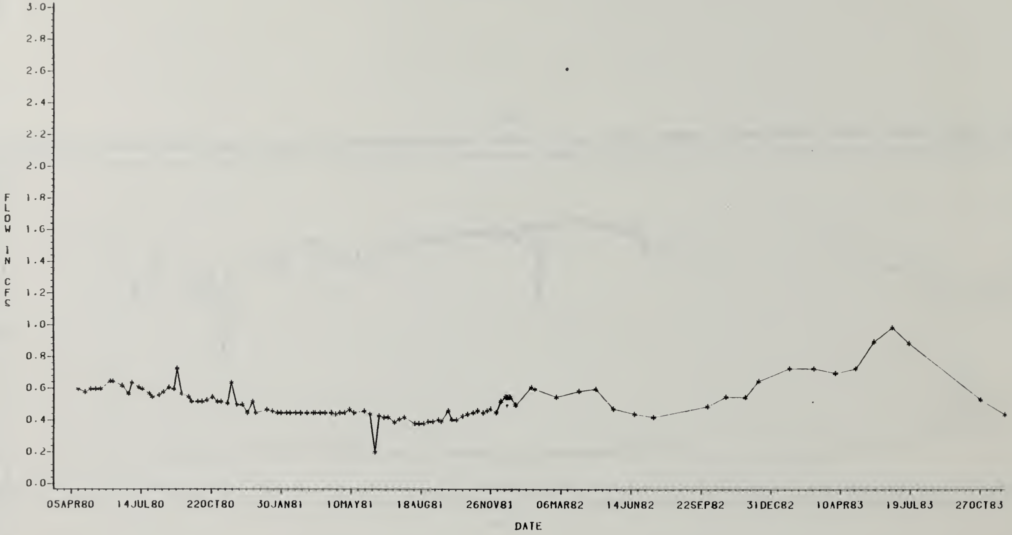
TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS10



TIME SERIES PLOT FOR SPRINGS AND SEEPS

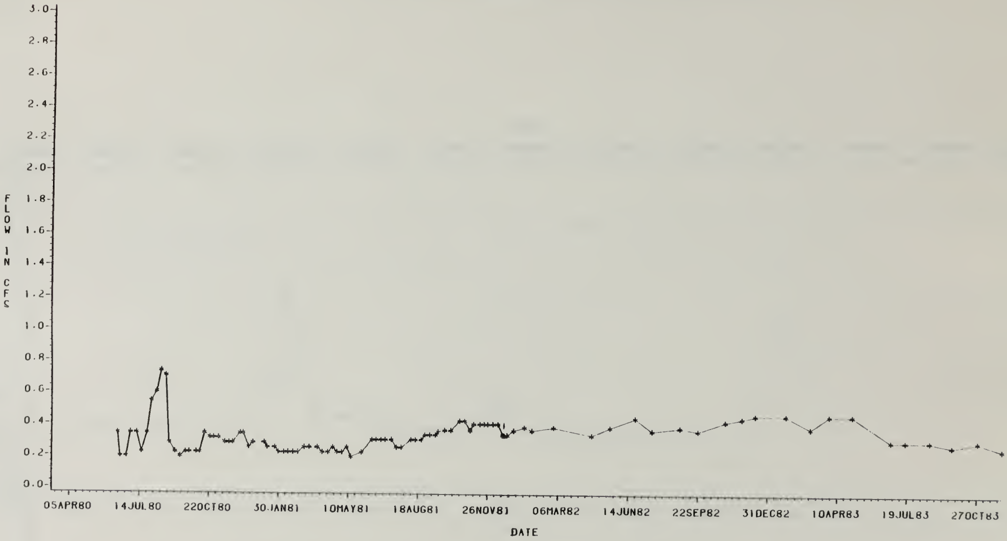
LOC=WS11



FLOW IN CFS

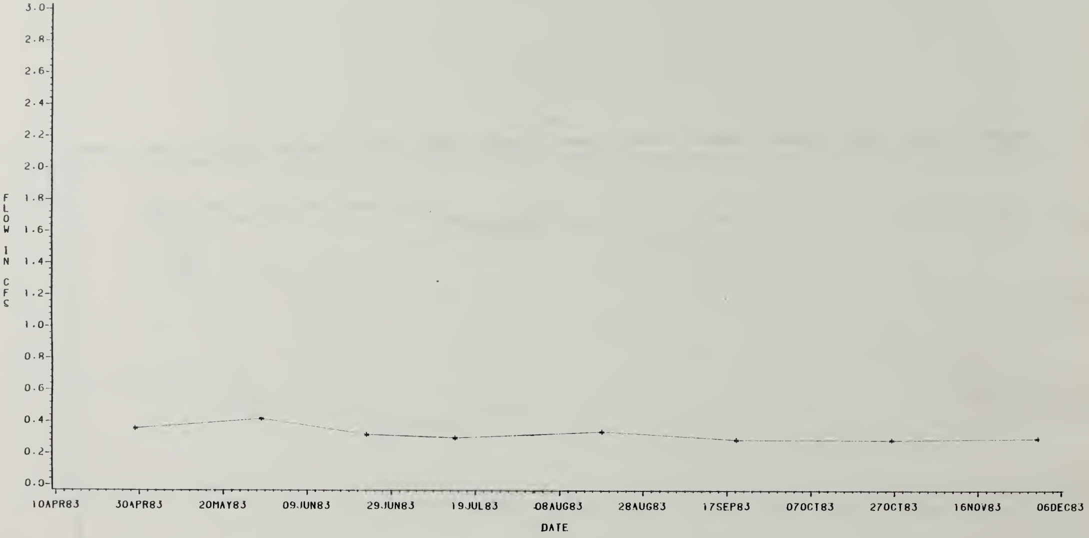
TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS12



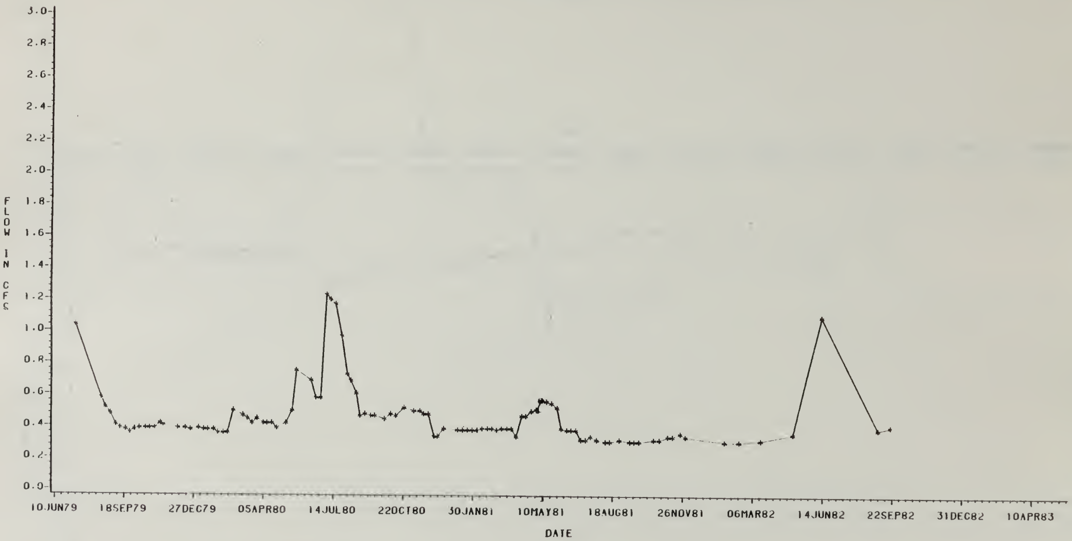
TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS13



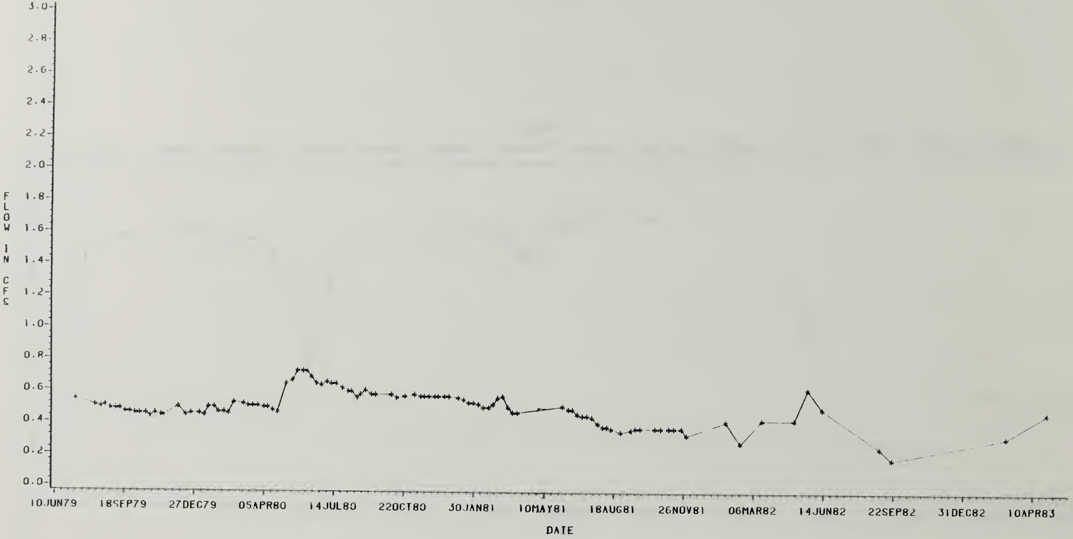
TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOG=WS21



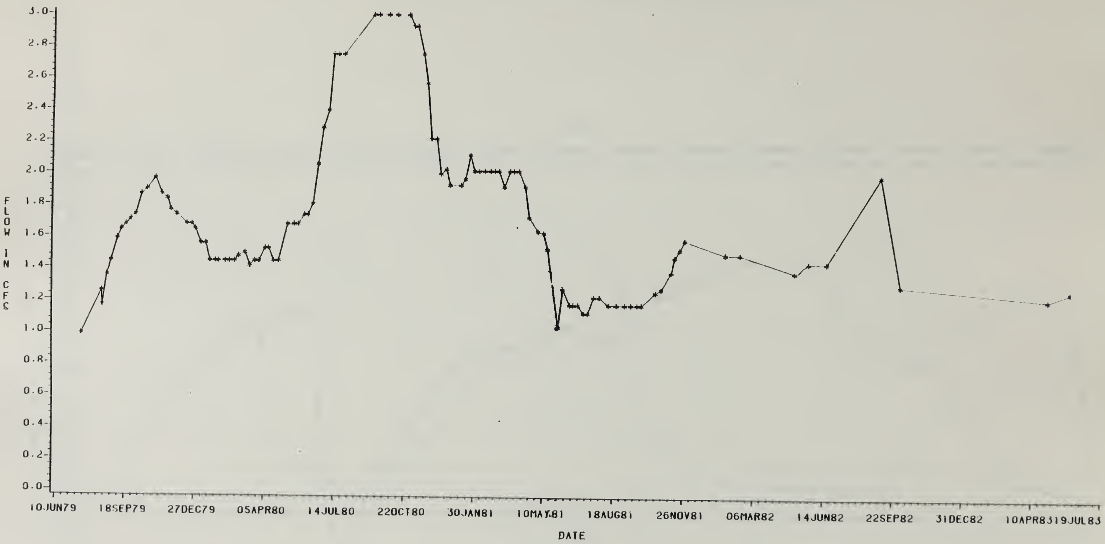
TIME SERIES PLOT FOR SPRINGS AND SEEPS

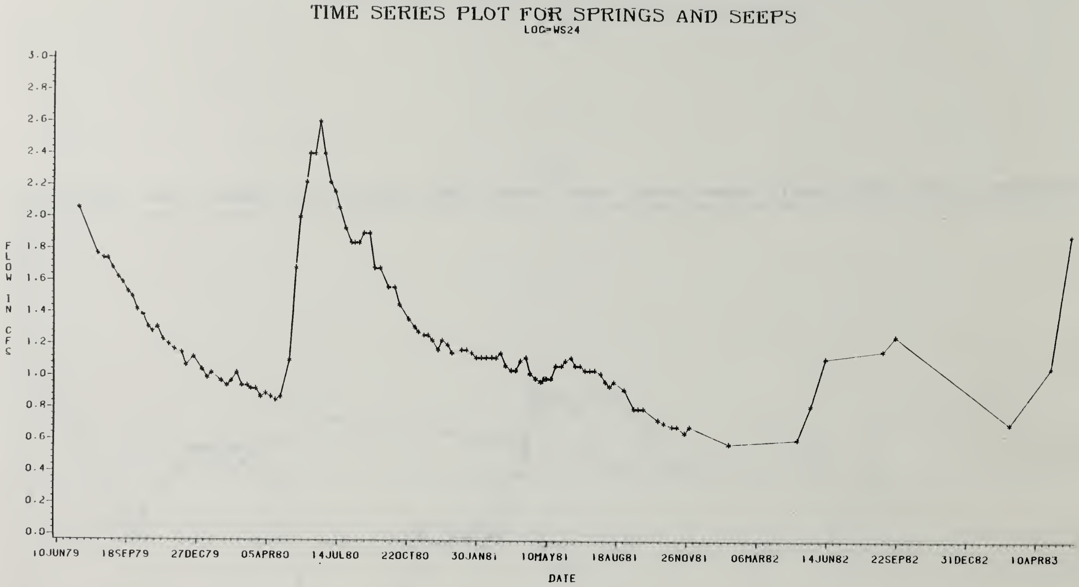
LOC=WS22



TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS23




TIME SERIES PLOT FOR SPRINGS AND SEEPS
LOC=WS24
FLOW IN CFS
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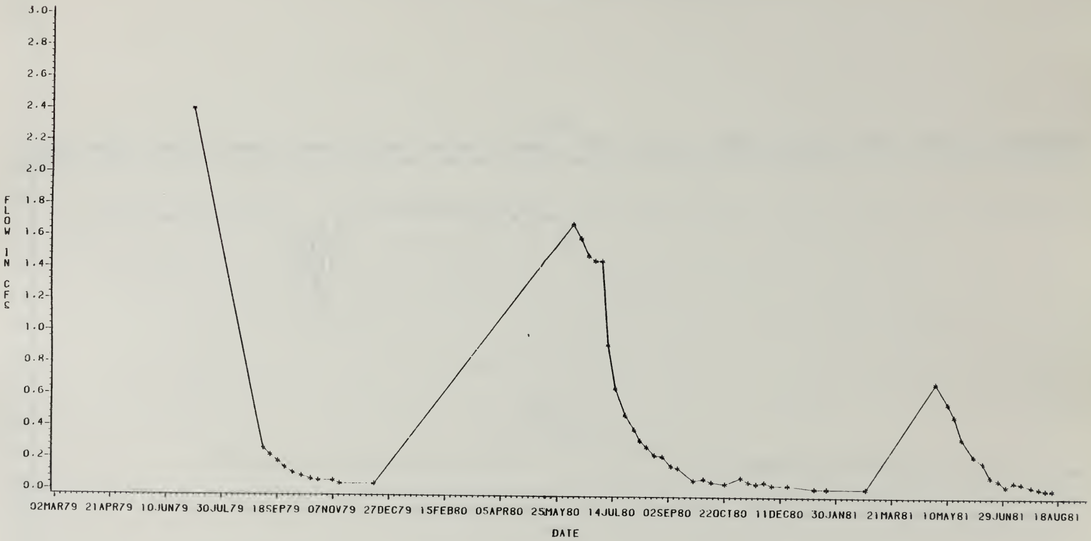
2.8
2.6
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
10JUN79
18SEP79
27DEC79
05APR80
14JUL80
22OCT80
30JAN81
10MAY81
18AUG81
26NOV81
06MAR82
14JUN82
22SEP82
31DEC82
10APR83
DATE

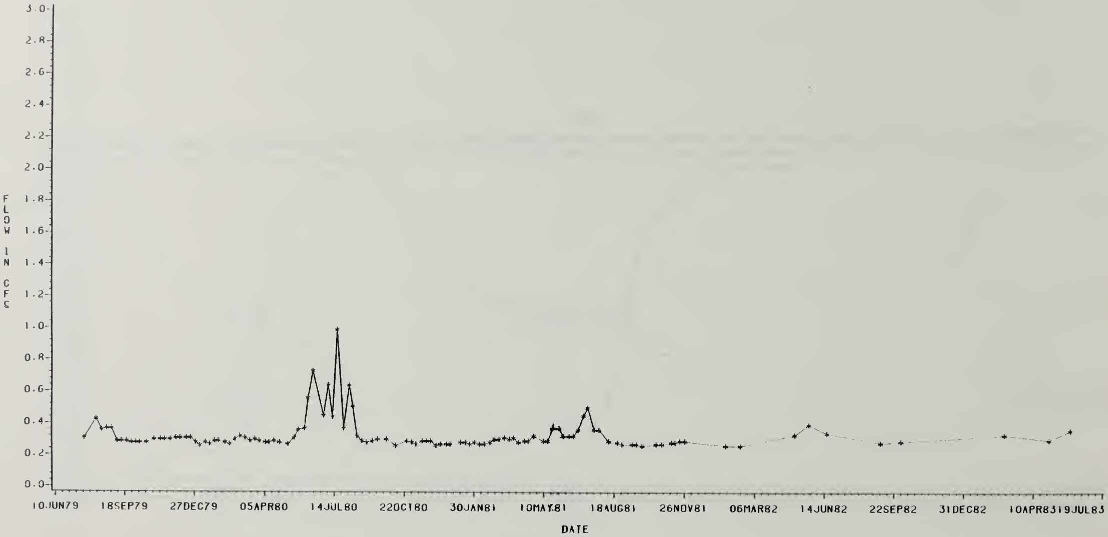
TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS25



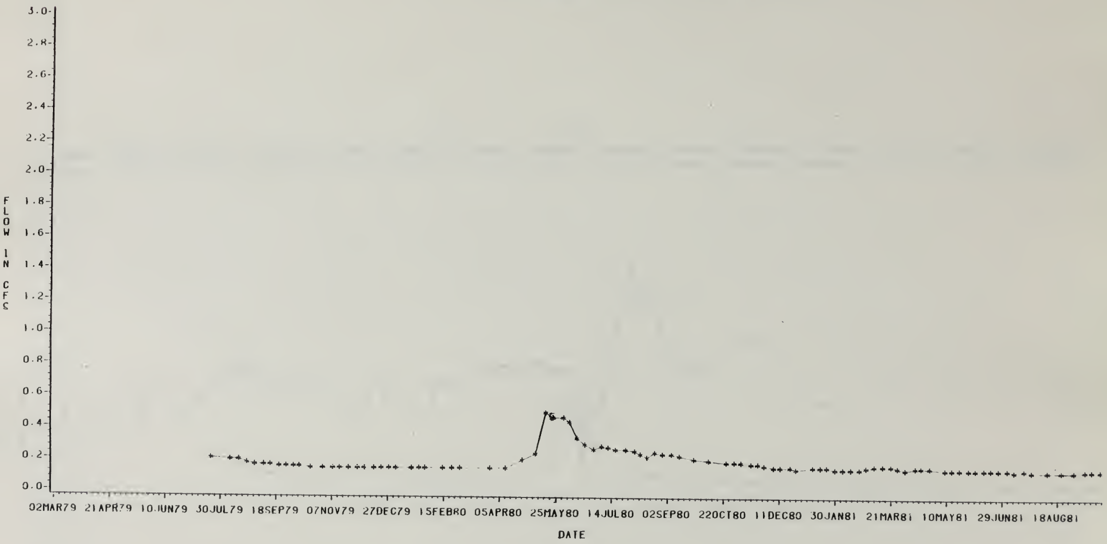
TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS26



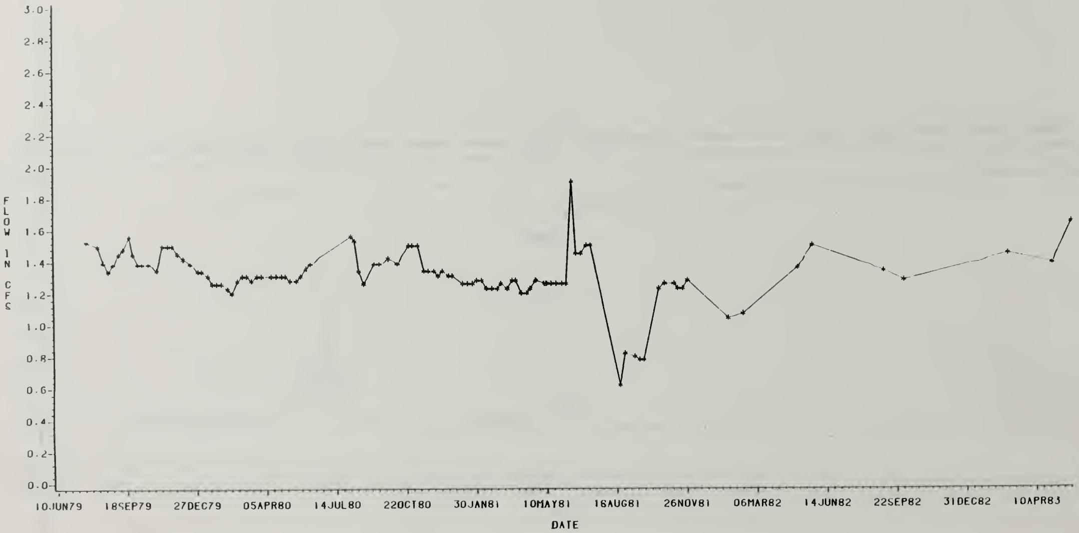
TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS27

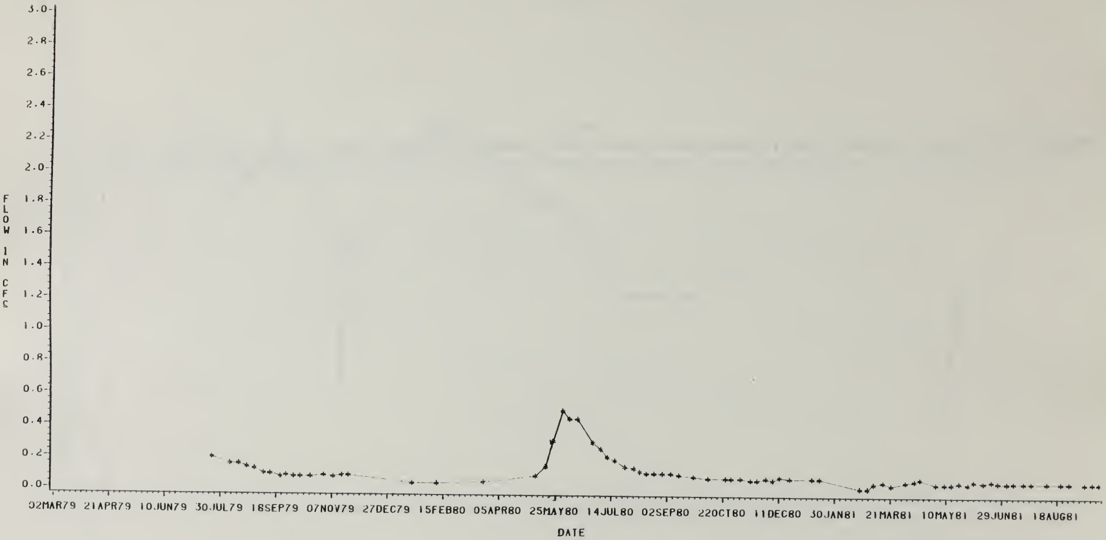


TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS28

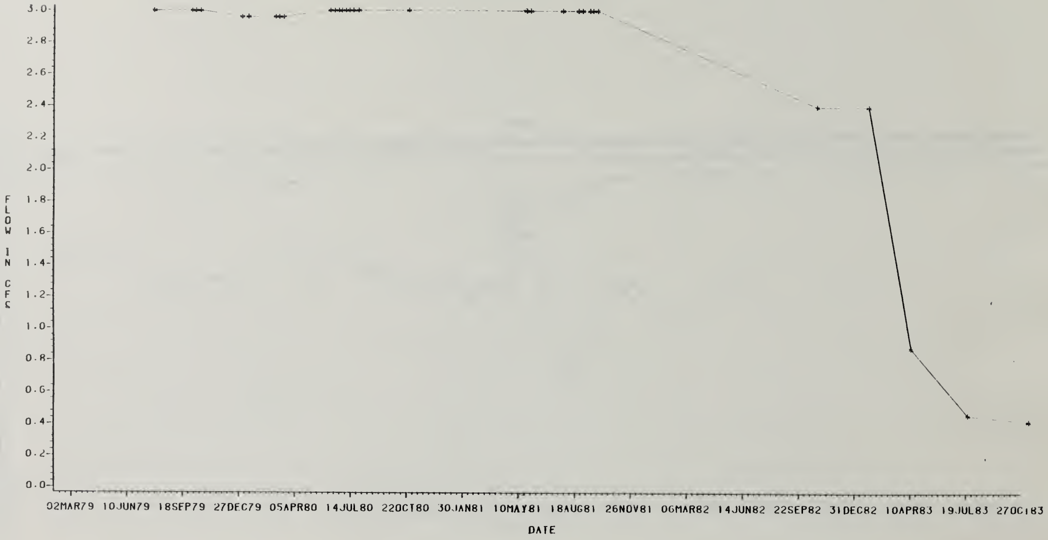


TIME SERIES PLOT FOR SPRINGS AND SEEPS
LOC=WS29



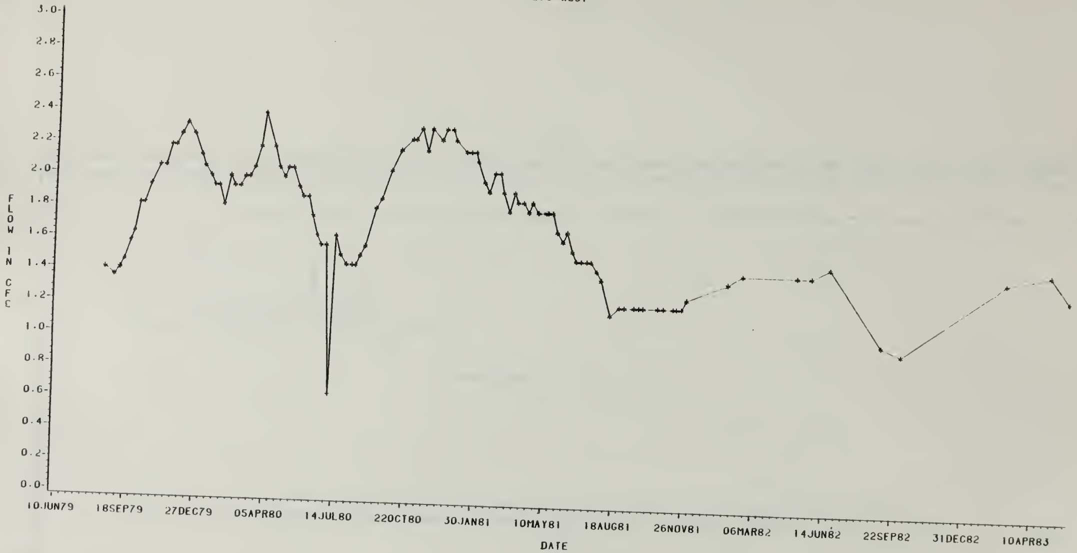
TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS30



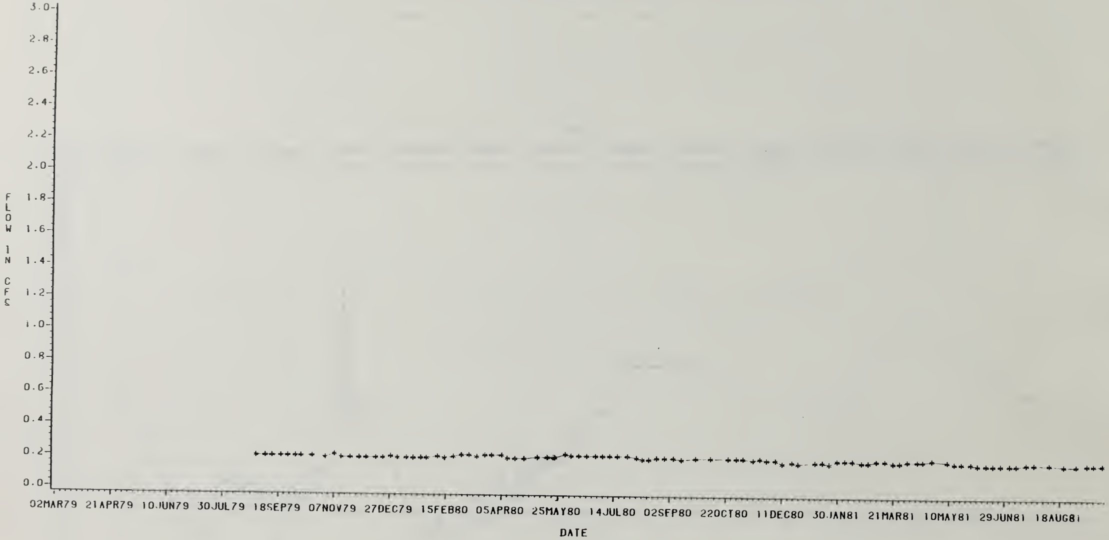
TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS31



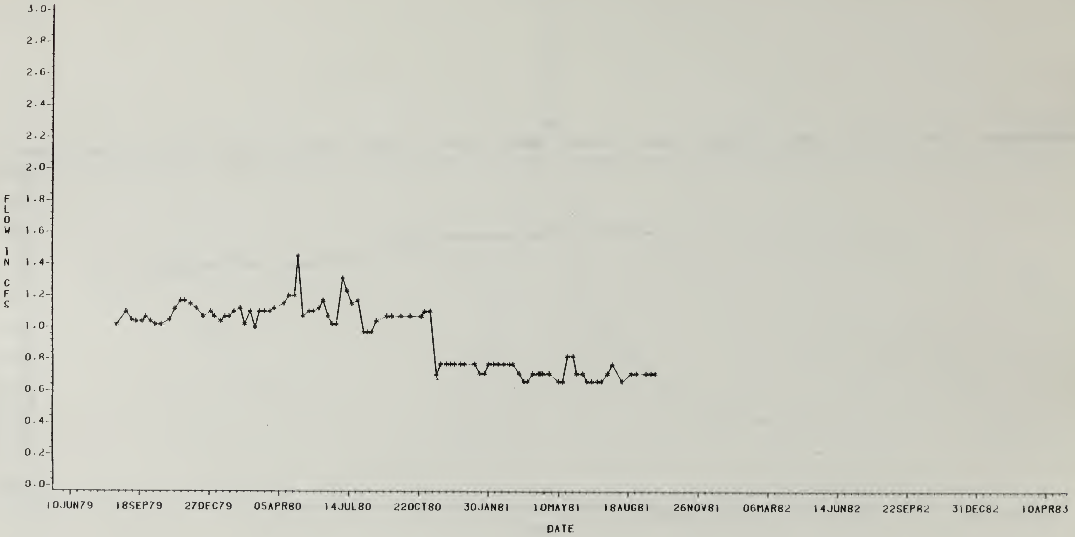
TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS32



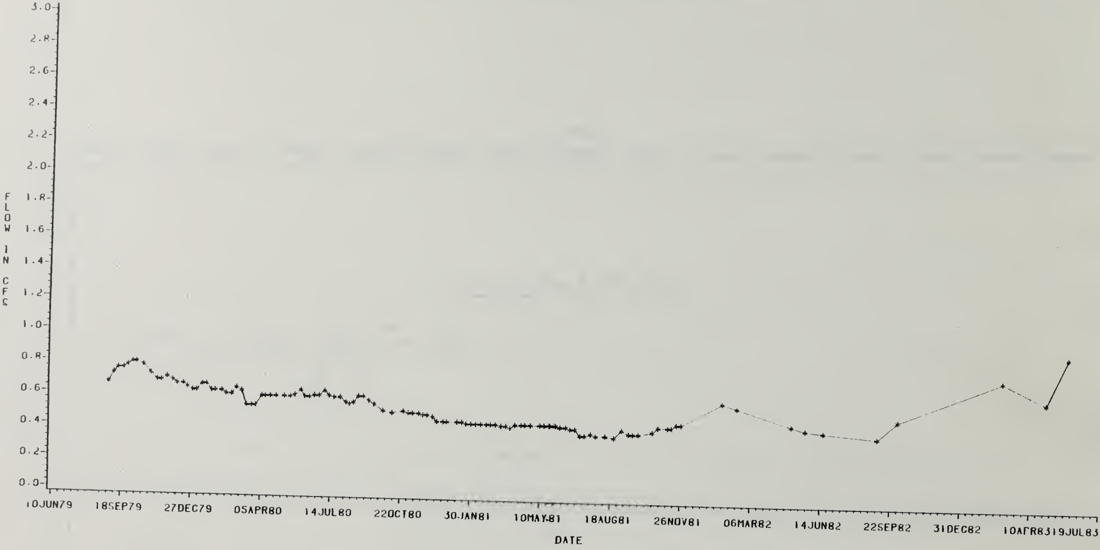
TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS33



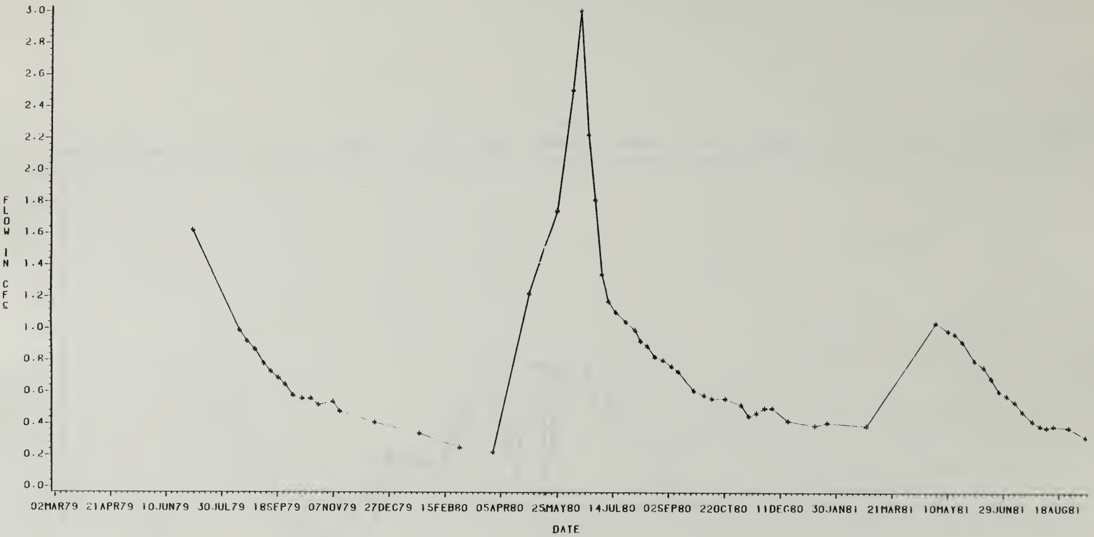
TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS34

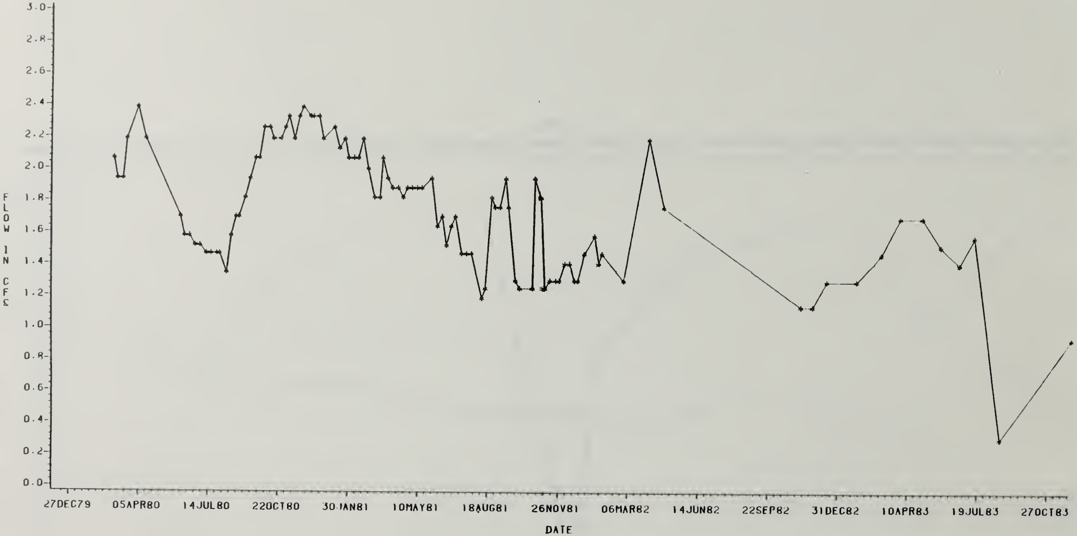


TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS35

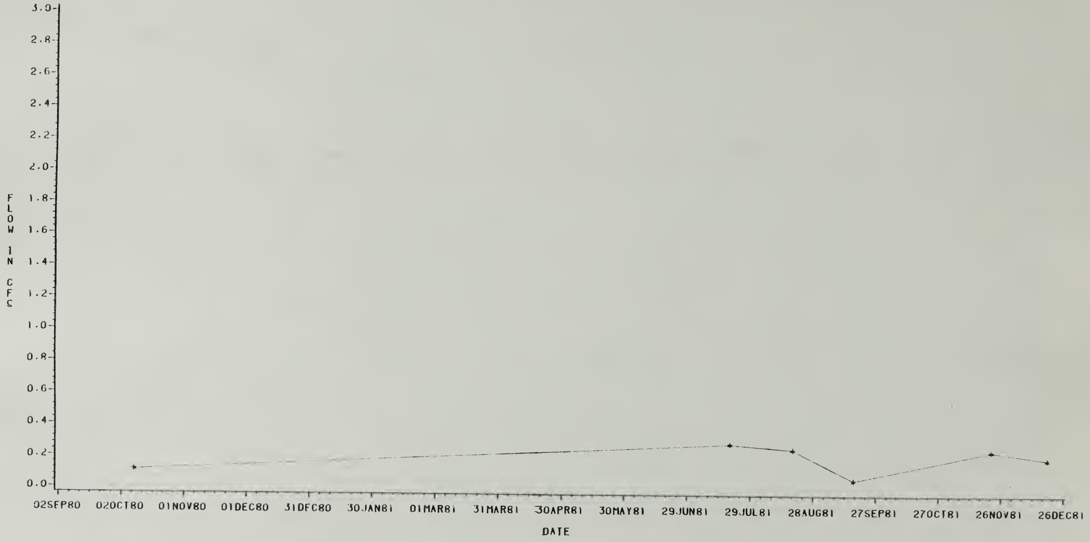


TIME SERIES PLOT FOR SPRINGS AND SEEPS
LOC=WS36



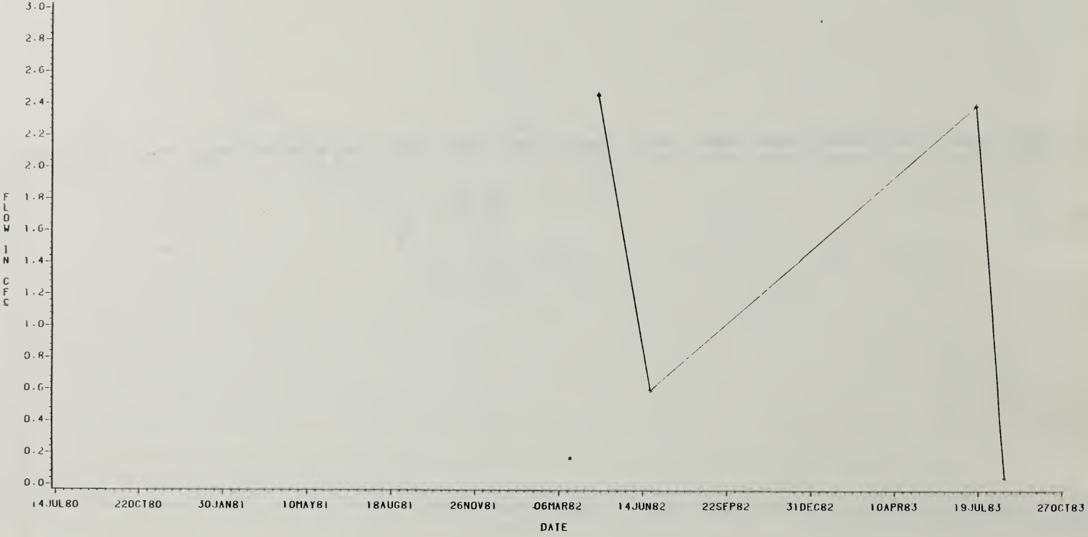
TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS37



TIME SERIES PLOT FOR SPRINGS AND SEEPS

LOC=WS66



ALLUVIAL WELLS

1.2.1.3 Alluvial Wells

Alluvial wells are located on and near C-b Tract; these wells are shown in Figure 1.2.1.3-1

Monitoring of alluvial wells was begun during the baseline period and has continued through C-b Tract's Developmental Monitoring Program, which ended March 1982. Approval of the Interim Monitoring Program (IMP) was granted by the OSPO for the period, April 1983 through April 1984.

Data reported in this section are for the Interim Monitoring Program (IMP).

Water levels and field measurements were sampled monthly for all alluvials except dry holes during the DMP. Water levels sampling frequency remains unchanged during the IMP. Field measurements (temperature, pH and conductivity) are to be sampled semiannually unless a maximum or minimum greater than 20% deviation from baseline values occurs for pH or conductivity; then an additional water quality sample must be taken and analyzed. See Table 1.2-1 for station list and associated sampling frequency.

Table 1.2.1.3-1 presents water level and field measurement data for June 1983 through November 1983 for all alluvial wells.

Time series plots of alluvial well levels are presented in this section; for reference see Table 1.2.1.3-2.

Stevens Recorder instrumentation for monitoring continuous water levels were operating at ten alluvial wells during the Development Monitoring Program (DMP), hence these recorders were removed upon approval of the OSPO for the Interim Monitoring Program (IMP).

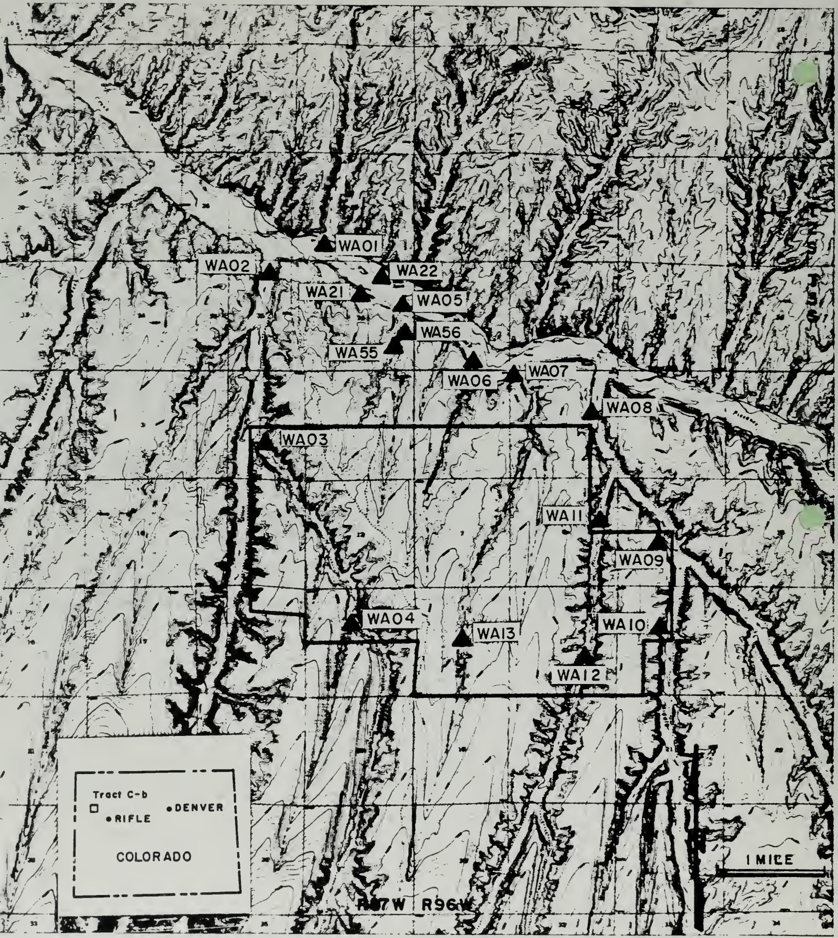

WA01
WA02
WA22
WA21
WA05
WA56
WA55
WA06
WA07
WA08
WA03
WA11
WA09
WA04
WA13
WA10
WA12
Tract C-b
RIFLE
DENVER
COLORADO
1 MILE
R97W
R96W

Figure I.2.1.3-1 ALLUVIAL AQUIFER MONITORING NETWORK

TABLE 1.2.1.3-1

CB-TRACT
WATER LEVELS AND FIELD MEASUREMENTS
ALLUVIAL WELLS
FOR SAMPLE DATE SHOWN

WELL	YR	MO	DY	ST	DEPTH (FT)	WATER TEMP (C)	PH	FIELD FLUORIDE (MG/L)	SPEC COND (UMHOS)
WA01	83	6	27		6241.5				.0
		7	25		6243.7				.0
		8	19		6240.6				.0
		9	19		6238.5				.0
		10	31		6237.9				.0
		11	28		6237.8	10.0	7.7	.9	1670.0
WA02	83	6	13		6273.9				.0
		7	25		6276.8				.0
		8	19		6274.5				.0
		9	20		6273.9				.0
		10	31		6273.6				.0
		11	28		6273.8	8.5	7.8	1.4	1220.0
WA03	83	6	13		6371.3				.0
		7	25		6376.2				.0
		8	18		6376.0				.0
		9	7		6376.2				.0
		10	30		6372.9				.0
		11	28		6370.6	8.5	7.6	.6	1330.0
WA05	83	6	27		6327.8				.0
		7	14		6328.5				.0
		8	19		6327.4				.0
		9	19		6326.9				.0
		10	31		6326.9				.0
		11	28		6326.8	8.5	7.6	.5	1390.0
WA06	83	6	15		6328.9				.0
		7	11		6335.3				.0
		8	18		6329.5				.0
		9	14		6326.9				.0
		10	31		6325.4				.0
		11	28		6325.1	9.0	7.5		1390.0
WA07	83	6	15		6355.2				.0
		7	11		6360.4				.0
		8	18		6358.6				.0

PLUGGD = WELL PLUGGED
DRY = WELL DRY
FLWING = WELL FLOWING
INACCS = WELL INACCESSIBLE

TABLE 1.2.1.3-1 (cont'd)

CB-TRACT
WATER LEVELS AND FIELD MEASUREMENTS
ALLUVIAL WELLS
FOR SAMPLE DATE SHOWN

WELL	YR	MO	DY	ST	DEPTH (FT)	WATER TEMP (C)	PH	FIELD FLUORIDE (MG/L)	SPEC COND (UMHOS)
WA07	83	9	14		6354.0				.0
		10	31		6352.2				.0
		11	28		6351.8	8.0	7.8	.3	1090.0
WA08	83	6	27		6386.9				.0
		7	11		6386.8				.0
		8	18		6389.9				.0
		9	19		6390.0				.0
		10	31		6388.4				.0
		11	28		6388.0	8.5	7.7	.3	1640.0
WA09	83	6	27		6492.3				.0
		7	11		6493.0				.0
		8	18		6497.0				.0
		9	19		6497.0				.0
		10	31		6496.1				.0
		11	28		6495.3	8.5	7.8	.3	1320.0
WA11	83	6	27		6450.7				.0
		7	11		6450.6				.0
		8	18		6450.0				.0
		11	28		6450.2				.0
WA12	83	6	27		6640.3				.0
		7	11		6639.9				.0
		8	18		6639.4				.0
		9	19		6639.3				.0
		10	31		6637.5				.0
		11	28		6638.9	8.0	7.7	.3	1520.0
WA21	83	7	21		6291.1				.0
WA22	83	7	21		6287.7				.0
WA55	83	6	28		6440.2				.0
		7	21		6440.0				.0
		8	22		6437.7				.0
		9	19		6406.4				.0

PLUGGD = WELL PLUGGED
DRY = WELL DRY
FLWING = WELL FLOWING
INACCS = WELL INACCESSIBLE

TABLE 1.2.1.3-1 (cont'd)

CB-TRACT
WATER LEVELS AND FIELD MEASUREMENTS
ALLUVIAL WELLS
FOR SAMPLE DATE SHOWN

WELL	YR	MO	DY	ST	DEPTH (FT)	WATER TEMP (C)	PH	FIELD FLUORIDE (MG/L)	SPEC COND (UMHOS)
WA55	83	9	20		6439.7				.0
		10	21		6439.9				.0
			31		6406.9				.0
		11	28	INACSS	.0				.0
WA56	83	6	28		6437.0				.0
		7	21		6438.8				.0
		8	22		6438.7				.0
		9	20		6438.4				.0
		10	21		6438.7				.0
		11	28	INACSS	.0				.0

PLUGGD = WELL PLUGGED
DRY = WELL DRY
FLWING = WELL FLOWING
INACCS = WELL INACCESSIBLE

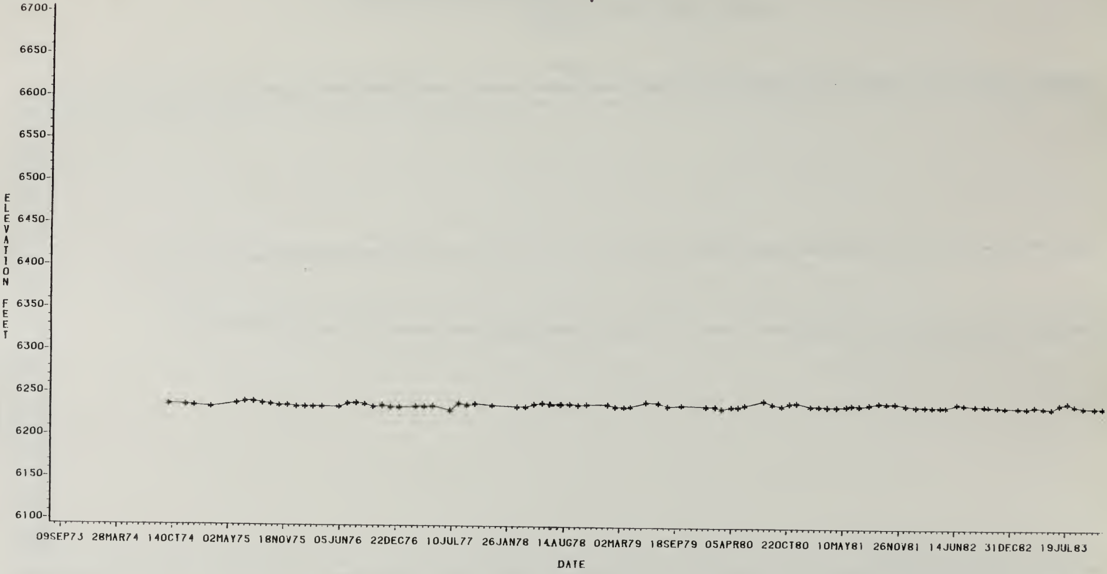
TABLE 1.2.1.3-2

PLOTS OF WATER LEVELS IN ALLUVIAL WELLS

Well No.	Computer Code	Page No.
A-1	WA01	I-85
A-2	WA02	I-86
A-3	WA03	I-87
A-5	WA05	I-88
A-6	WA06	I-89
A-7	WA07	I-90
A-8	WA08	I-91
A-9	WA09	I-92
A-10	WA10	I-93
A-11	WA11	I-94
A-12	WA12	I-95
A-5A	WA55	I-96
A-5B	WA56	I-97

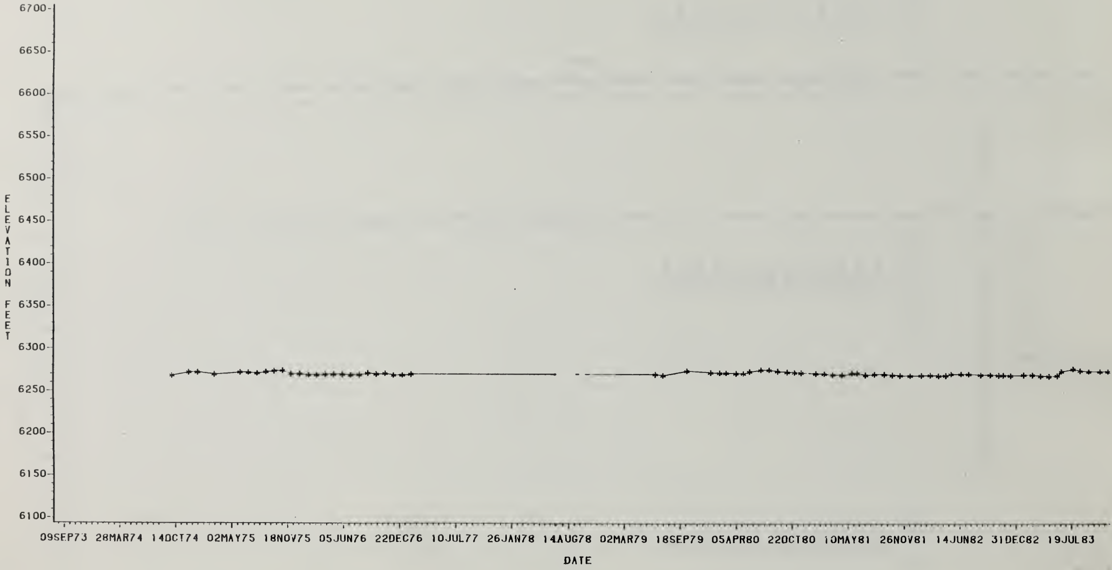
WATER LEVEL PLOTS IN ALLUVIAL WELLS

LOC=WA01



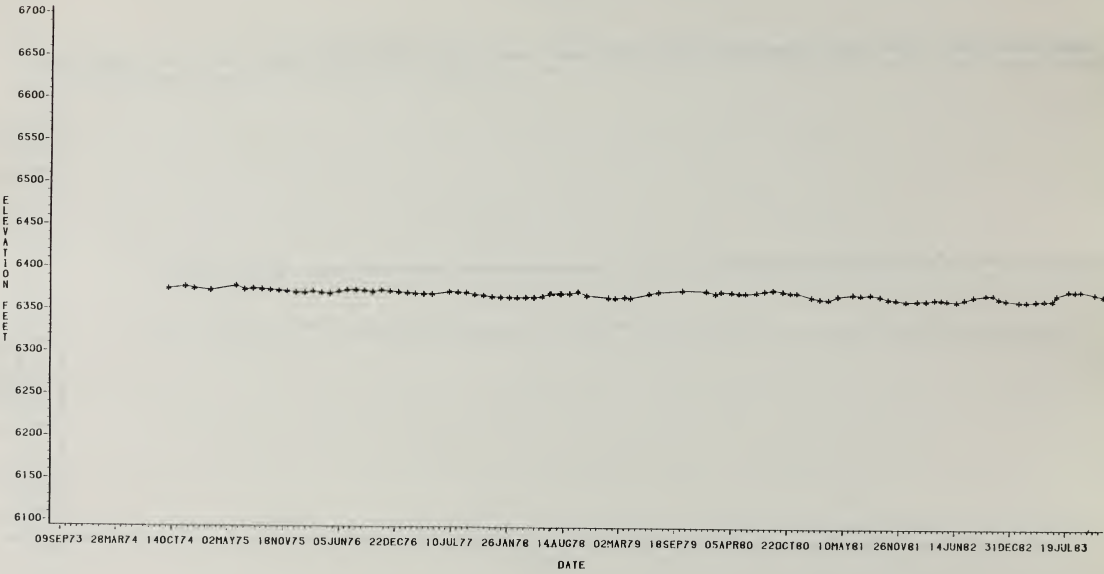
WATER LEVEL PLOTS IN ALLUVIAL WELLS

LOC=WA02



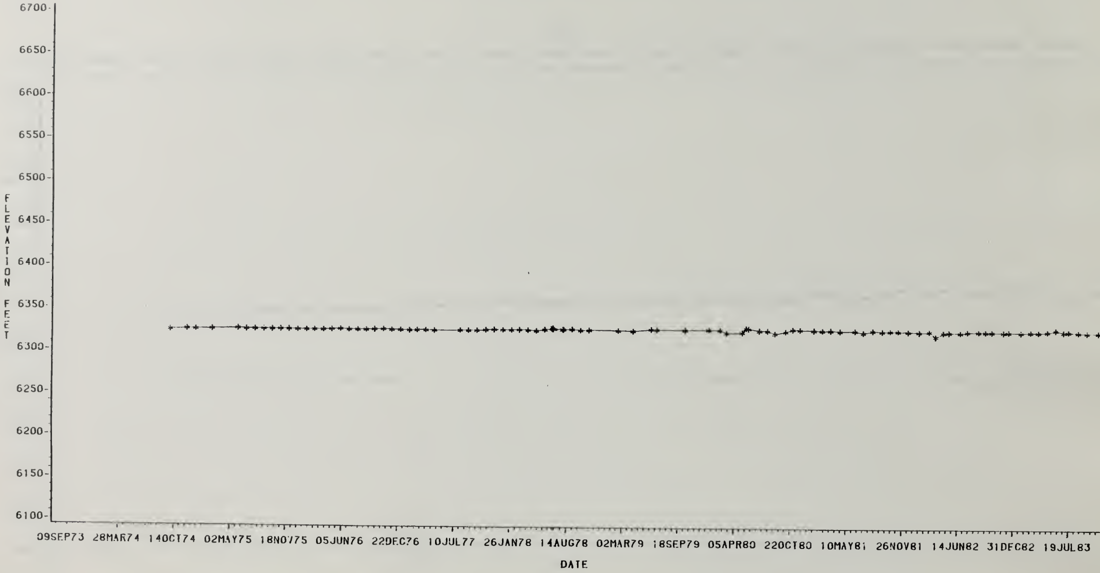
WATER LEVEL PLOTS IN ALLUVIAL WELLS

LOC=WA03



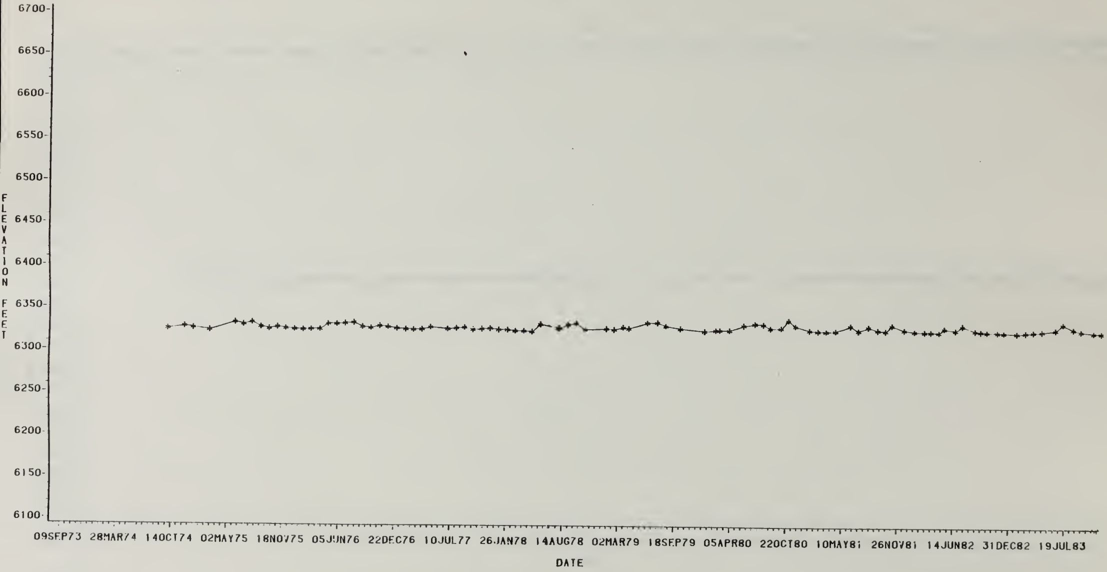
WATER LEVEL PLOTS IN ALLUVIAL WELLS

LOC=WA05



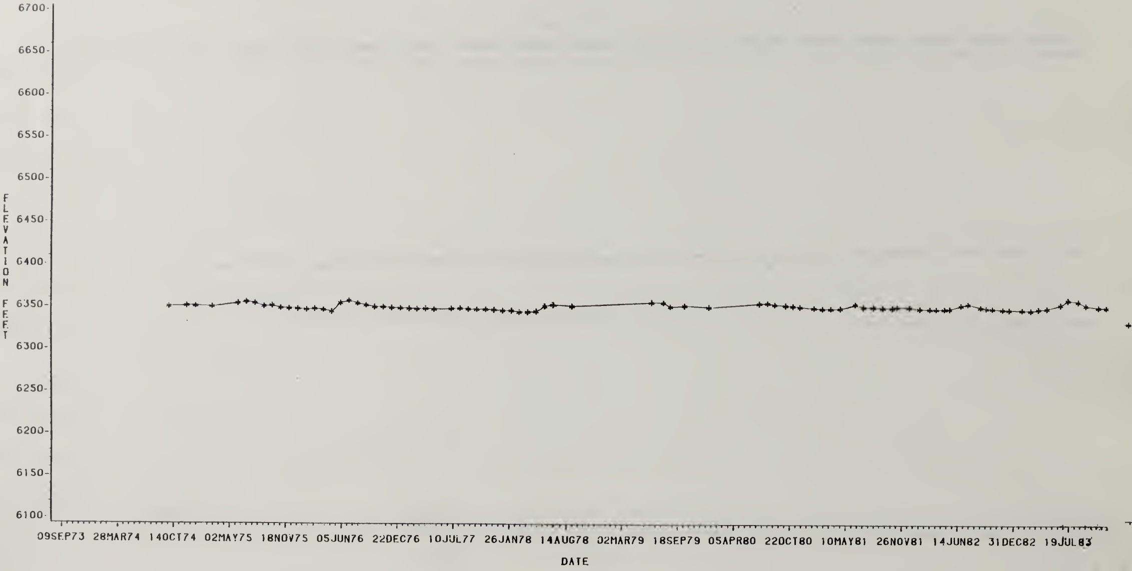
WATER LEVEL PLOTS IN ALLUVIAL WELLS

LOC=WA06



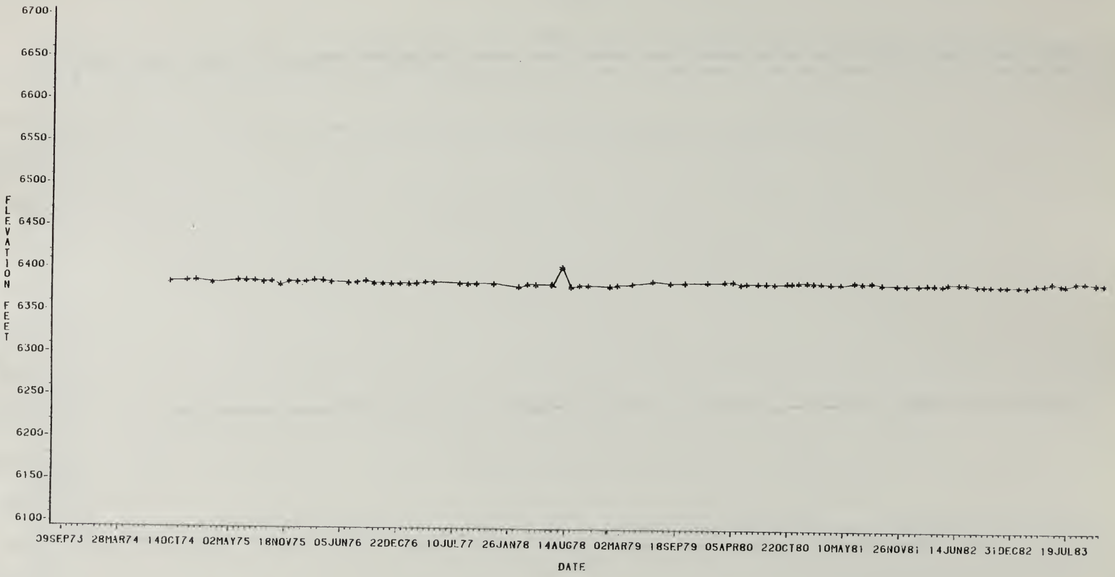
WATER LEVEL PLOTS IN ALLUVIAL WELLS

LOC=WA07



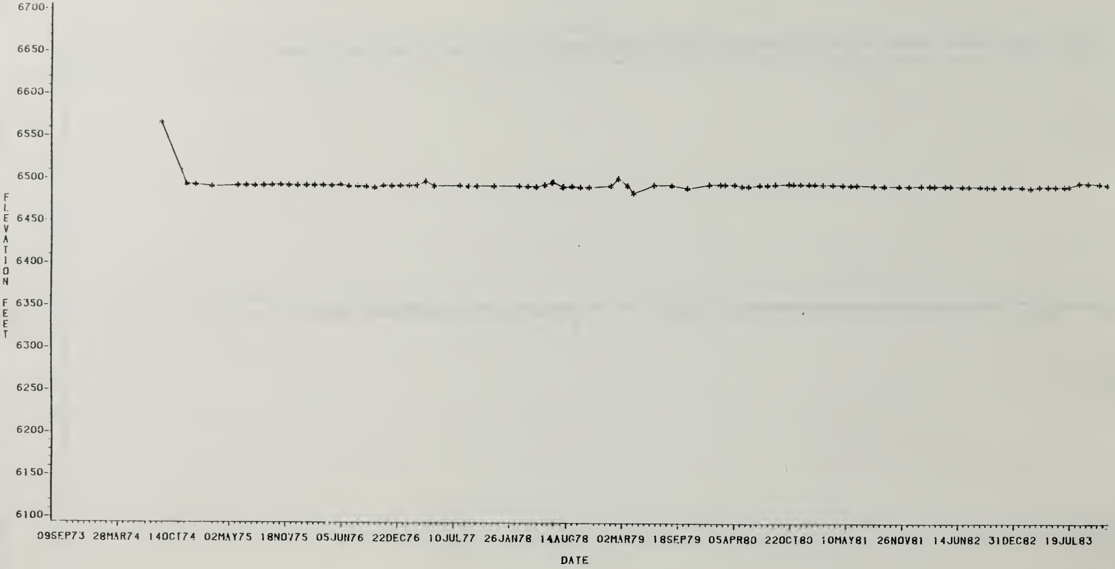
WATER LEVEL PLOTS IN ALLUVIAL WELLS

LOC=WA08



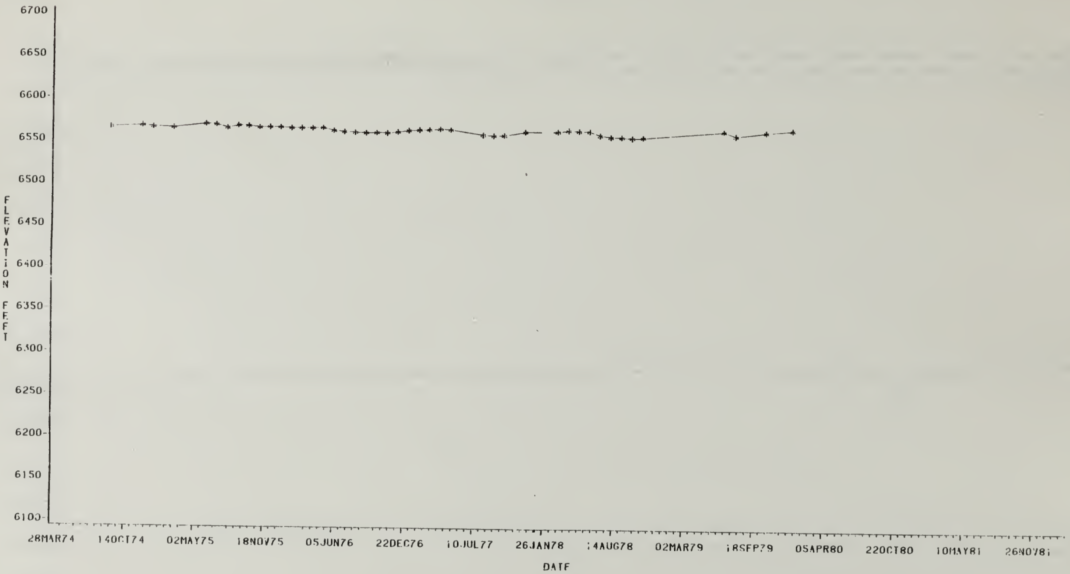
WATER LEVEL PLOTS IN ALLUVIAL WELLS

LOC=WA09



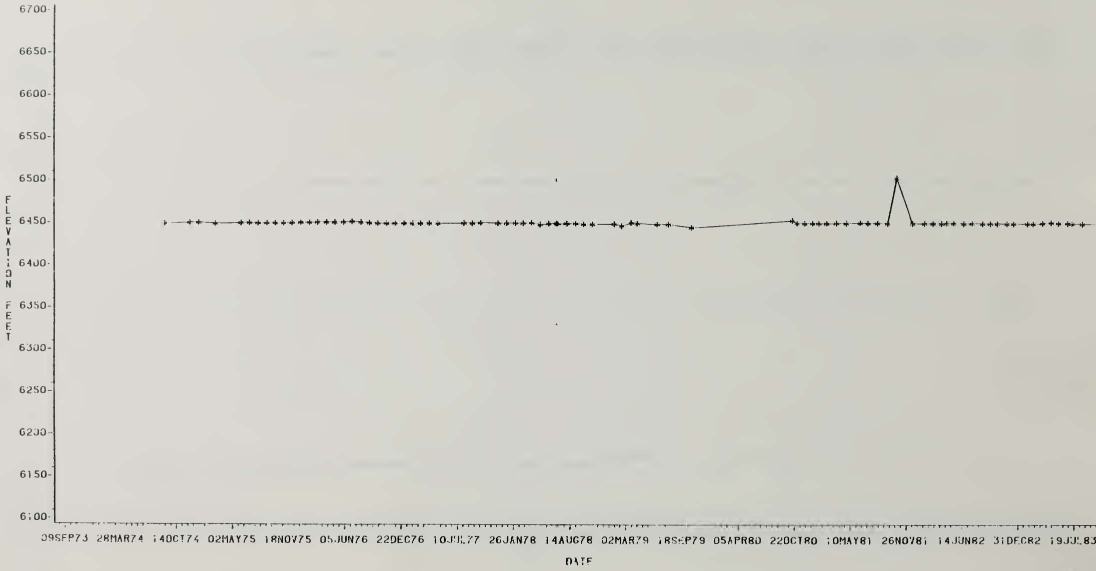
WATER LEVEL PLOTS IN ALLUVIAL WELLS

LOC=WA10



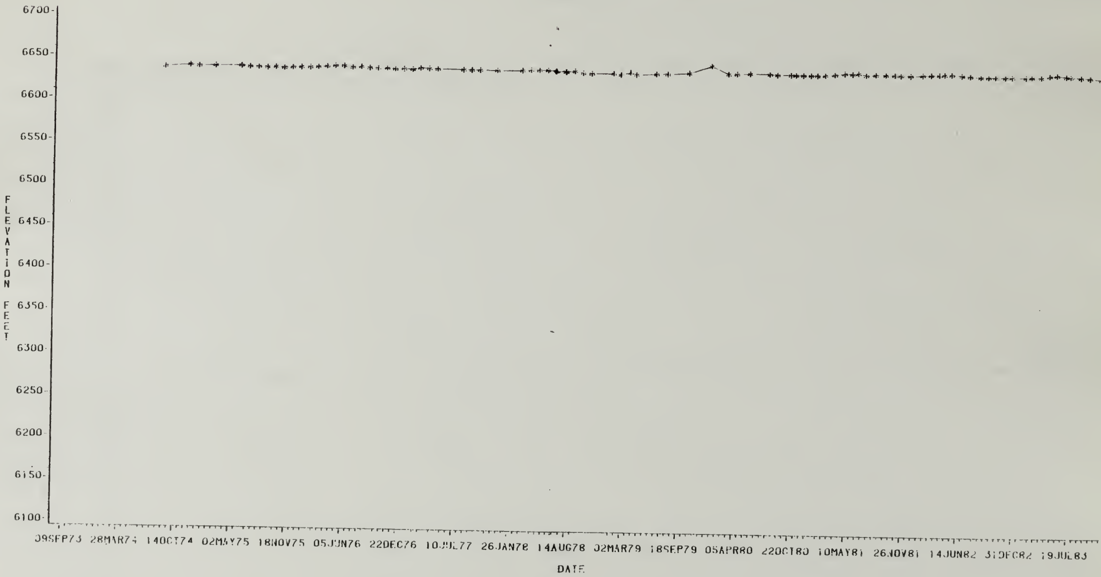
WATER LEVEL PLOTS IN ALLUVIAL WELLS

LOC=WA11



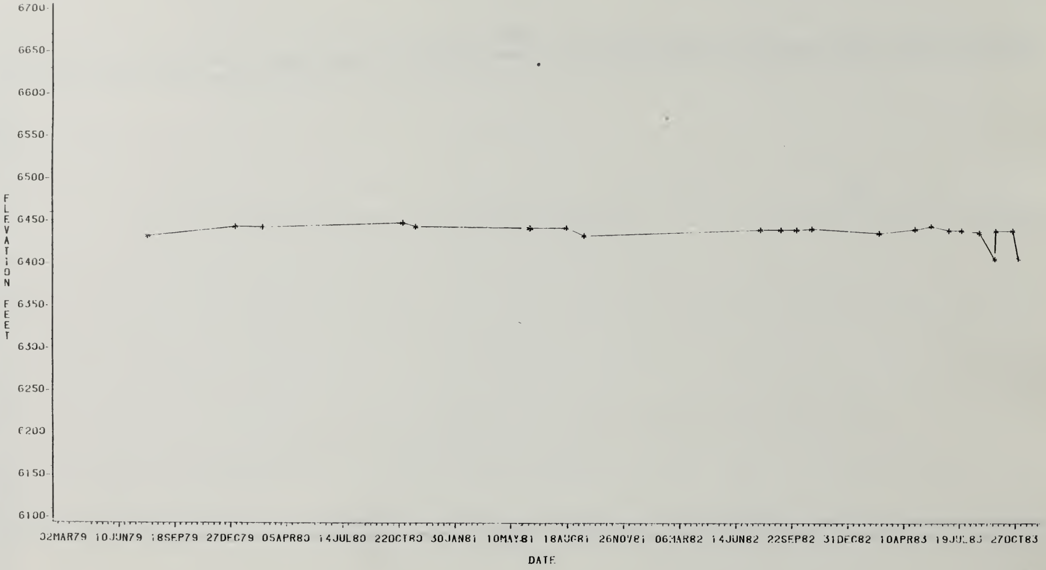
WATER LEVEL PLOTS IN ALLUVIAL WELLS

LOC=WA12



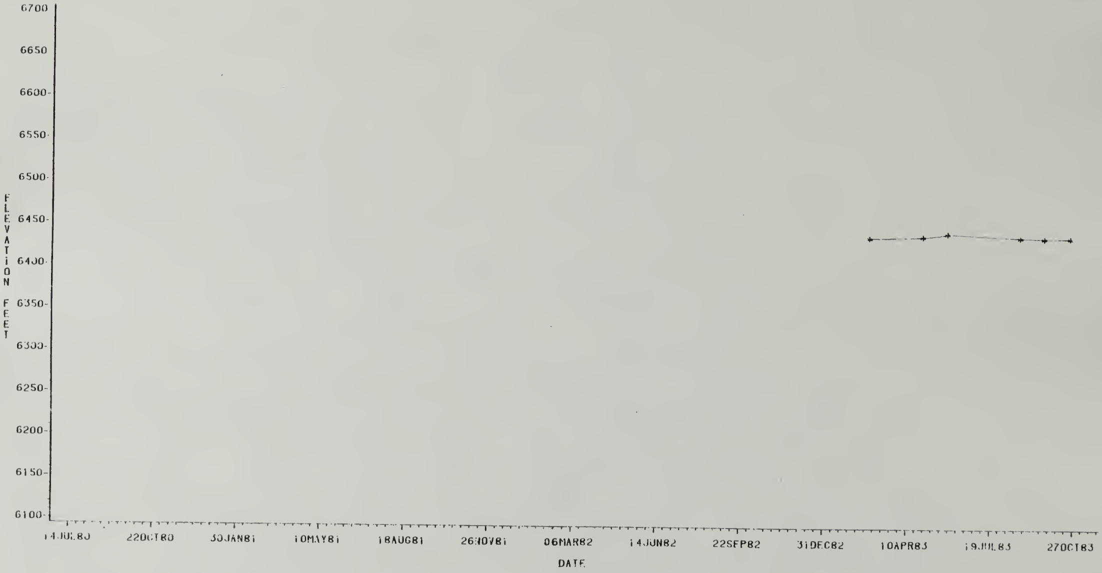
WATER LEVEL PLOTS IN ALLUVIAL WELLS

LOC=WASS



WATER LEVEL PLOTS IN ALLUVIAL WELLS

LOC=WA56



1.2.1.4 Bedrock Wells

This section contains well water elevation readings sampled below the alluvium formation. Data are presented in tabular format for sample period June 1983 through November 1983 and time series plots for 1979 through November 1983. Monitoring of these wells is a requirement of the Interim Monitoring Program (IMP) and the Water Augmentation Plan (WAP), State of Colorado Court, Division 5.

Deep well monitoring network on C-b Tract is presented in 2 figures in this section, Figures 1.2.1.4-1 and 1.2.1.4-2. Well computer codes on these figures are defined as such:

Uinta formation - WC$$
Upper Parachute Creek 1 (UPC_1) - WD$$
Upper Parachute Creek 2 (UPC_2) - WE$$
Lower Parachute Creek 3 (LPC_3) - WG$$
Lower Parachute Creek 4 (LPC_4) - WH$$
Upper Aquifer Zone - WX$$
Lower Aquifer Zone - WY$$

Sampling frequencies for these wells vary by type, location (in respect to Tract) and purpose of monitoring. Table 1.2-1 references the formation of recompletion and sampling requirements for each well. This table replaced Exhibit B, which displayed monitoring requirements for the WAP during development on C-b Tract.

Tables and figures of data reported in this section are presented in the following list:

Table No.	Title	Page No.
Table 1.2.1.4-1	Water Levels - Uinta Formation Zone	I-103
Table 1.2.1.4-2	Water Levels - Upper Parachute Creek 1	I-104
Table 1.2.1.4-3	Water Levels - Upper Parachute Creek 2	I-106
Table 1.2.1.4-4	Water Levels - Lower Parachute Creek	I-107
Table 1.2.1.4-5	Water Levels - Upper Aquifer Wells	I-108
Table 1.2.1.4-6	Water Levels - Upper Aquifer Wells Required by WAP	I-109
Table 1.2.1.4-7	Water Levels - Lower Aquifer Wells	I-110
Table 1.2.1.4-8	Water Levels - Lower Aquifer Wells Required by WAP	I-111
Table 1.2.1.4-9	Water Levels - Composite Wells	I-112
Table 1.2.1.4-10	Stevens Recorder Daily Water Levels - Upper Aquifer Wells	I-113
Table 1.2.1.4-11	Stevens Recorder Daily Water Levels - Lower Aquifer Wells	I-117
Table 1.2.1.4-12	Stevens Recorder Daily Water Levels - Upper Parachute Creek 1	I-120
Table 1.2.1.4-13	Stevens Recorder Daily Water Levels - Lower Parachute Creek	I-124

Table No.	Title	Page No.
Table 1.2.1.4-14	List of Bedrock Well Water Levels - Time Series Plots	I-127
Table 1.2.1.4-15	List of Upper Aquifer Well Water Levels - Time Series Plots	I-155
Table 1.2.1.4-16	List of Lower Aquifer Well Water Levels - Time Series Plots	I-164
Table 1.2.1.4-17	List of Composite Well Water Levels - Time Series Plots	I-179

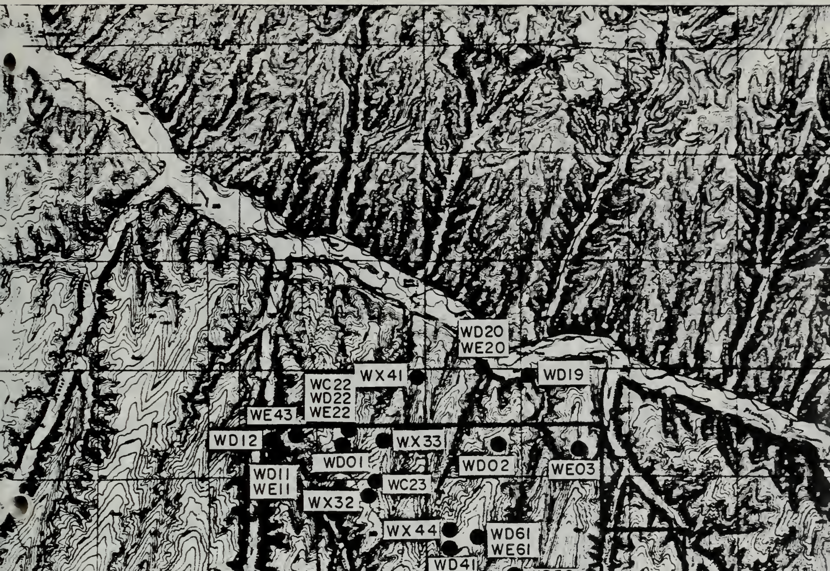

WD20
WE20
WX41
WD19
WC22
WD22
WE22
WE43
WD12
WX33
WD01
WD02
WE03
WD11
WE11
WC23
WX32
WX44
WD61
WE61
WD41
WE41
WD52
WE52
WC91
WD91
WE91
WD51
WE51
WD90
WE04
WD21
WE21
WC17
WD17
WE17
Tract C-b
RIFLE
DENVER
COLORADO
1 MILE
WD18
WE18
R96W

Figure I.2.1.4-1 DEEP WELL MONITORING NETWORK NEAR C-b TRACT FOR UINTA, UPC_1 AND UPC_2 ZONES

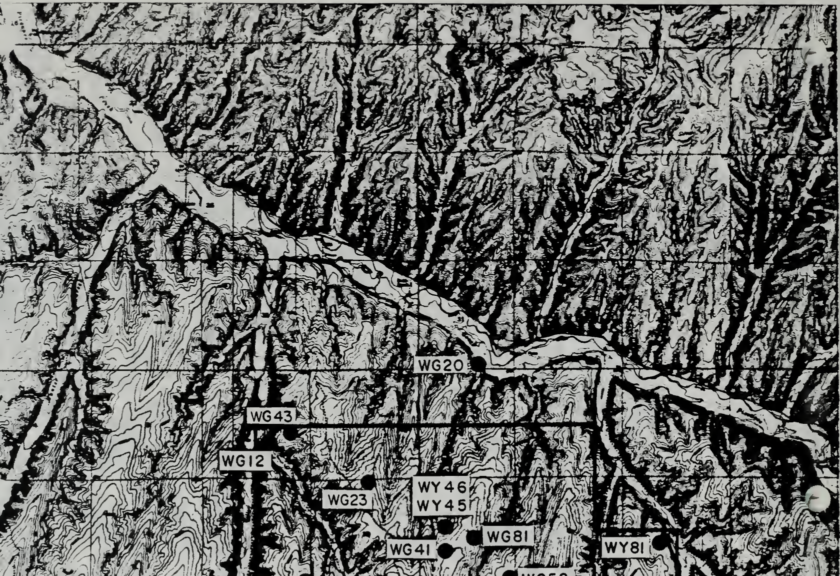

WG20
WG43
WG12
WG23
WY46
WY45
WG81
WG41
WY81
WG52
WG91
WG51
WG21
WH21
WG17
WY75
Tract C-b
RIFLE
DENVER
COLORADO
1 MILE
WG18
R96W

Figure I.2.1.4-2 DEEP WELL MONITORING NETWORK NEAR C-b TRACT FOR LPC_3, LPC_4 ZONES

TABLE 1.2.1.4-1

CB-TRACT
WATER LEVELS
UINTA FORMATION ZONE
FOR SAMPLE DATE SHOWN

			WELL ID			
			WC17	WC22	WC23	WC41
YR	MO	DY	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)
83	6	7		6332	6444	
		8	6656			6521
	7	5		6335		
		7				6517
		28			6482	
	8	3			6434	
		4	6704			
		5		6339		
		14				6522
	9	6			6468	
		7				6522
		12		6336		
	10	21		6337		
		25				6521
	11	23	6667			
		29			6457	

PLUGGD = WELL PLUGGED
DRY = WELL DRY
FLWING = WELL FLOWING
INACCS = WELL INACCESSABLE

TABLE 1.2.1.4-2

C-a TRACT
WATER LEVELS
UPPER PARACHUTE - CREEK 1
FOR SAMPLE DATE SHOWN

YR	MO	DY	W002 ELEV (FT)	W011 ELEV (FT)	W012 ELEV (FT)	W014 ELEV (FT)	W015 ELEV (FT)	W017 ELEV (FT)	W018 ELEV (FT)	W019 ELEV (FT)
83	6	7				6485	6503		6915	
		8		6345				6658		
		13			6353					
		15								6352
	7	5							6915	
		6	6420			6484	6504			
		7								6355
		25			6355					
	8	4	6421					6653		
		8				6483	6504		6915	
		18								6354
		19			6356					
	9	6	6422			6482	6505		6915	
		7		6353	6356					
		14								6352
	10	24	6421			6481	6506			
		28		6352	6355				6915	
		31								6351
	11	17			6355					
		21			6355					
		28						6649		6350
		29	6420			6482	6507			

PLUGGD = WELL PLUGGED
DRY = WELL DRY
FLWING = WELL FLOWING
INACCS = WELL INACCESSABLE

TABLE 1.2.1.4-2 (cont'd)

CH-TRACT
WATER LEVELS
UPPER PARACHUTE - CREEK 1
FOR SAMPLE DATE SHOWN

YR	MO	DY	WD20 ELEV (FT)	WD21 ELEV (FT)	WD22 ELEV (FT)	WD41 ELEV (FT)	WD51 ELEV (FT)	WD52 ELEV (FT)	WD57 ELEV (FT)	WD61 ELEV (FT)	WD90 ELEV (FT)	WD91 ELEV (FT)
83	6	7			6318	6513	6626			6534	6622	
		8		6699				6583				6484
		15	6330						6636			
	7	5			6320							
		6				6512	6620	6582		6535	6620	
		7	6331	6699								6485
	8	3					6622				6608	
		4							6638			
		5			6324							
		8								6534		
		16						6583			6616	
		17		6699								
		19										6484
		26	6330									
	9	6				6511	6618			6535		
		7		6699								6484
		12			6325			6583			6614	
		14	6329									
	10	21			6325							
		24		6699		6510	6614			6534	6611	
		25										6483
		28						6584				
		31	6329									
	11	16	6323						6636			
		17	6328									
		18									6609	
		24		6700			6611				6608	
		29						6583			6532	

PLUGGED = WELL PLUGGED
DRY = WELL DRY
FLWING = WELL DRY
INACCS = WELL INACCESSABLE

TABLE 1.2.1.4-3

CH-TRACT
WATER LEVELS
UPPER PARACHUTE - CREEK 2
FOR SAMPLE DATE SHOWN

YR	MO	DY	WE03 ELEV (FT)	WE04 ELEV (FT)	WE11 ELEV (FT)	WE17 ELEV (FT)	WE18 ELEV (FT)	WE20 ELEV (FT)	WE21 ELEV (FT)	WE41 ELEV (FT)	WE43 ELEV (FT)	WE51 ELEV (FT)	WE52 ELEV (FT)	WE61 ELEV (FT)	WE91 ELEV (FT)
83	6	7					6915			6470		6553		6534	
		8	6361	6657	6344	6626			6642				6574		6453
		15						6328							
	7	5					6915				6330				
		6								6469		6547	6564	6535	
		7	6361	6657				6328	6643						6453
	8	2									6332				
		3										6542			
		4				6625									
		8					6915							6534	
		16	6361	6659									6561		
		17							6638						
		19													6452
		26						6327							
	9	6					6915			6467		6536		6535	
		7			6347				6636						6451
		12	6361	6659							6333		6559		
		14						6327							
	10	21									6331				
		24							6638	6465		6530		6535	
		25													6450
		28	6361	6659	6347		6915						6551		
		31						6327							
	11	16						6326							
		17						6326							
		28				6625			6641			6526			
		29	6361	6657									6575	6532	

PLUGGD = WELL PLUGGED
DRY = WELL DRY
FLWING = WELL FLOWING
INACCS = WELL INACCESSABLE

TABLE 1.2.1.4-4

CH-TRACT
WATER LEVELS FOR LOWER PARACHUTE CREEK
FOR SAMPLE DATE SHOWN

					WG - LPC3						WH - LPC4				
YR	MO	DY	WG12 ELEV (FT)	WG17 ELEV (FT)	WG18 ELEV (FT)	WG20 ELEV (FT)	WG21 ELEV (FT)	WG23 ELEV (FT)	WG41 ELEV (FT)	WG43 ELEV (FT)	WG51 ELEV (FT)	WG52 ELEV (FT)	WG61 ELEV (FT)	WG91 ELEV (FT)	WH21 ELEV (FT)
83	6	7			6841			6048	6305		6379		6291		
		8		6626			6642					6440		6329	6642
		13	6261												
		15				6328									
	7	5			6841					6295					
		6							6301		6374	6437	6287		
		7				6328	6643								6642
		25	6266												
		28						6042							
	8	2								6307					
		3						6409			6370				
		4		6625											
		8			6841								6282		
		16										6433			
		17					6638								6638
		19	6271											6321	
		26				6327									
	9	6			6842			6036	6292		6366		6278		
		7	6272				6636							6319	6636
		12								6306		6431			
		14				6327									
	10	21								6306					
		24					6638		6287		6361		6274		6638
		25												6315	
		28	6271		6842							6427			
		31				6327									
	11	16				6326									
		17	6241												
		21	6241												
		28		6624			6641				6359				6641
		29						6088				6425	6271		

PLUGGD = WELL PLUGGED
DRY = WELL DRY
FLWING = WELL FLOWING
INACCS = WELL INACCESSABLE

TABLE 1.2.1.4-5

CB-TRACT
WATER LEVELS IN UPPER AQUIFER WELLS
FOR SAMPLE DATE SHOWN

		WELL ID - M.P. ELEV (FT)	
		WX32	WX44
YR	MO	DEPTH (FT)	DEPTH (FT)
83	6		6468
	7	5942	6465
	8	5938	6467
	9	5936	6465
	10	5938	6464
	11	5938	6463

PLUGGD = WELL PLUGGED
DRY = WELL DRY
FLWING = WELL FLOWING
INACCS = WELL INACCESSABLE

TABLE 1.2.1.4-6

CB-TRACT
WATER LEVELS IN UPPER AQUIFER WELLS REQUIRED BY WATER AUGMENTATION PLAN FOR SAMPLE DATE SHOWN

		WELL ID - MEASURING POINT ELEVATION (FT)						
		WX64	WX65	WX67	WX69	WX71	WX72	WX73
		DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
YR	MO	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)
83	7	6772	6332	6307	6900		6761	7650
	10	6767		6307	6899			7649
	11		6331			CAPPED	6760	

PLUGGD = WELL PLUGGED
DRY = WELL DRY
FLWING = WELL FLOWING
INACCS = WELL INACCESSABLE
NS = NOT SAMPLED
CAPPED = WELL HEAD CAPPED

TABLE 1.2.1.4-7

CB-TRACT
WATER LEVELS IN LOWER AQUIFER WELLS
FOR SAMPLE DATE SHOWN

		WELL ID-M.P. ELEV(FT)			
		WY44	WY45	WY46	WY81
YR	MO	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)
83	6	6307	6307	6304	6540
	7	6298	6302	6300	6542
	8	6295	6300	6296	6539
	9	6291	6296	6289	6538
	10	6286		6287	6537
	11	6284		6284	6536

PLUGGD = WELL PLUGGED
DRY = WELL DRY
FLWING = WELL FLOWING
INACCS = WELL INACCESSABLE

TABLE 1.2.1.4-8

CB-TRACT
WATER LEVELS IN LOWER AQUIFER WELLS
REQUIRED BY WATER AUGMENTATION PLAN
FOR SAMPLE DATE SHOWN

		WELL ID - MEASURING POINT ELEVATION (FT)											
		WY64	WY65	WY67	WY68	WY69	WY70	WY71	WY72	WY75	WY76	WY78	WY79
YR	MO	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)
83	7	6434	6312	6234	6487	6885	6961	6570	6776	6772	6864	7075	6629
	10	6431		6233	6486	6886					6864		
	11		6314				6961	6569	6776	6771		7075	6627

PLUGGD = WELL PLUGGED
DRY = WELL DRY
FLWING = WELL FLOWING
INACCS = WELL INACCESSABLE
NS = NOT SAMPLED

TABLE 1.2.1.4-9

CB-TRACT
WATER LEVELS IN COMPOSITE WELLS REQUIRED BY WATER AUGMENTATION PLAN FOR SAMPLE DATE SHOWN

		WELL ID - MEASURING POINT ELEVATION (FT)						
		WV01	WV02	WV03	WV04	WV05	WV10	WV37
YR	MO	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)
83	6						6581	6505
	7	6330				7362	6580	6502
	8						6580	6498
	9							6495
	10					7369		6491
	11	6295						6487

PLUGGD = WELL PLUGGED
DRY = WELL DRY
FLWING = WELL FLOWING
INACCS = WELL INACCESSABLE
NS = NOT SAMPLED
CAPPED = WELL HEAD CAPPED

TABLE 1.2.1.4-10

CA-TRACT
STEVENS RECORDER WATER LEVELS
UPPER AQUIFER WELLS
FOR SAMPLE DATE SHOWN

			WELL ID - FT FROM GROUND LEVEL	
			WX32	WX38
YR	MO	DY	DEPTH (FT)	DEPTH (FT)
83	6	1	5945.15	6466.46
		2	5944.43	6466.56
		3	5944.38	6466.38
		4	5944.38	6466.30
		5	5944.38	6466.24
		6	5944.38	6466.09
		7	5944.35	6466.01
		8	5944.35	6465.93
		9	5944.35	6465.89
		10	5944.35	6465.85
		11	5944.35	6465.76
		12	5944.35	6465.83
		13	5943.86	6465.77
		14	5943.85	6465.56
		15	5943.85	6465.50
		16	5943.85	6465.52
		17	5943.84	6465.53
		18	5943.84	6465.45
		19	5943.84	6465.49
		20	5942.98	6465.44
		21	5942.48	6465.36
		22	5942.47	6465.30
		23		6465.16
		24		6465.13
		25		6465.12
		26		6465.16
		27	5944.87	6465.18
		28	5944.82	6465.15
		29	5944.81	6465.13
		30	5944.81	6465.14
	7	1	5944.81	6465.07
		2	5944.21	6465.04
		3	5943.82	6465.05
		4	5943.32	6464.90
		5	5943.15	6464.77
		6	5942.94	6464.80
		7	5942.49	6464.75
		8	5942.42	6464.69
		9	5942.41	6464.63
		10	5942.42	6464.62
		11	5942.41	6464.60
		12	5942.41	6464.54
		13	5942.40	6464.54
		14	5942.30	6464.53
		15	5941.89	6464.59

TABLE 1.2.1.4-10 (cont'd)

CA-TRACT
STEVENS RECORDER WATER LEVELS
UPPER AQUIFER WELLS
FOR SAMPLE DATE SHOWN

			WELL ID - FT FROM GROUND LEVEL	
			WX32	WX38
YR	MO	DY	DEPTH (FT)	DEPTH (FT)
83	7	16	5941.59	6464.68
		17	5941.57	6464.65
		18	5941.66	6464.57
		19	5941.66	6464.47
		20	5941.66	6464.43
		21	5941.66	6464.32
		22		6464.27
		23		6464.21
		24		6464.18
		25	5943.16	6464.13
		26	5943.12	6464.13
		27	5942.33	6464.12
		28	5942.05	6464.10
		29	5942.05	6464.00
		30	5942.05	6464.00
		31	5942.05	6464.00
	8	1	5942.06	6464.00
		2	5942.06	6464.03
		3	5942.06	6464.01
		4	5942.06	6463.99
		5	5942.05	6463.93
		6	5942.05	6463.93
		7	5942.05	6463.95
		8	5941.79	6464.02
		9	5940.95	6464.02
		10	5939.96	6464.02
		11	5939.48	6464.02
		12	5939.38	6464.01
		13	5939.48	6463.89
		14	5939.48	6463.85
		15	5939.47	6463.80
		16	5939.47	6463.76
		17	5939.47	6463.74
		18	5939.40	6463.74
		19	5939.00	6463.67
		20	5938.88	6463.66
		21	5938.68	6463.62
		22	5938.66	6463.61
		23	5938.52	6463.57
		24	5938.24	6463.49
		25	5938.24	6463.37
		26	5938.24	6463.30
		27	5938.24	6463.23
		28	5938.24	6463.18
		29	5938.24	6463.12

TABLE 1.2.1.4-10 (cont'd)

Cb-TRACT
STEVENS RECORDER WATER LEVELS
UPPER AQUIFER WELLS
FOR SAMPLE DATE SHOWN

			WELL ID - FT FROM GROUND LEVEL	
			WX32	WX38
YR	MO	DY	DEPTH (FT)	DEPTH (FT)
83	8	30	5938.24	6463.05
		31		6462.96
	9	1	5938.24	6462.90
		2	5938.24	6462.89
		3	5937.88	6462.86
		4	5937.18	6462.90
		5	5936.85	6462.87
		6	5936.84	6462.76
		7	5936.84	6462.80
		8	5936.84	6462.81
		9	5936.84	6462.79
		10	5936.84	6462.72
		11	5936.84	6462.65
		12	5936.84	6462.53
		13	5937.87	6462.41
		14	5937.87	6462.35
		15	5937.87	6462.24
		16	5937.86	6462.16
		17	5937.00	6462.19
		18	5936.37	6462.16
		19	5935.78	6462.06
		20	5935.74	6461.95
		21	5935.72	6461.91
		22	5935.72	6461.86
		23	5935.72	6461.80
		24	5935.72	6461.70
		25	5935.72	6461.62
		26	5935.72	6461.59
		27	5935.72	6461.65
		28	5935.72	6461.64
		29	5935.72	6461.61
		30	5935.72	6461.64
	10	1	5935.07	6461.61
		2	5934.67	6461.72
		3	5934.09	6461.71
		4	5933.51	6461.62
		5	5933.42	6461.61
		6	5933.42	6461.54
		7	5933.42	6461.46
		8	5933.42	6461.36
		9	5933.42	6461.32
		10	5933.42	6461.26
		11	5933.42	6461.15
		12	5933.42	6461.07
		13	5933.42	6461.12

TABLE 1.2.1.4-10 (cont'd)

```
                    C-a TRACT
         STEVENS RECORDER WATER LEVELS
              UPPER AQUIFER WELLS
             FOR SAMPLE DATE SHOWN


         WELL ID - FT FROM GROUND LEVEL
              WX32      WX36
            DEPTH      DEPTH
YR  MO  DY  (FT)        (FT)
-------------------------------

83  10  14  5933.42  5451.21
        15  5933.42  5451.10
        16  5933.42  5451.04
        17  5933.42  5451.03
        18           5451.14
        19  5933.42  5451.08
        20  5933.42  5451.10
        21  5933.42  5451.03
        22  5933.42  5450.96
        23  5933.42  5450.94
        24  5933.42  5450.81
        25  5933.42
        26  5933.42
        27  5933.42
```

TABLE 1.2.1.4-11

```
      CB-TRACT
STEVENS RECORDER WATER LEVELS
LOWER AQUIFER WELLS
FOR SAMPLE DATE SHOWN


                  WELL ID - FT FROM GROUND LEVEL
                      WY44
                  DEPTH
 YR   MO   DY     (FT)
--------------------------
 83    6    1   6306.25
            2   6305.93
            3   6305.72
            4   6305.53
            5   6305.31
            6   6305.14
            7   6305.01
            8   6304.83
            9   6304.55
           10   6304.44
           11   6304.44
           12   6304.25
           13   6303.93
           14   6303.75
           15   6303.61
           16   6303.44
           17   6303.25
           18   6303.15
           19   6303.01
           20   6302.82
           21   6302.58
           22   6302.39
           23   6302.23
           24   6302.11
           25   6302.01
           26   6301.85
           27   6301.68
           28   6301.52
           29   6301.51
           30   6301.40
       7    1   6301.23
            2   6301.07
            3   6300.96
            4   6300.67
            5   6300.48
            6   6300.35
            7   6300.15
            8   6300.03
            9   6299.84
           10   6299.70
           11   6299.53
           12   6299.39
           13   6299.23
           14   6299.12
           15   6299.03
```

TABLE 1.2.1.4-11 (cont'd)

CB-TRACT
STEVENS RECORDER WATER LEVELS
LOWER AQUIFER WELLS
FOR SAMPLE DATE SHOWN

			WELL ID - FT FROM GROUND LEVEL WY49 DEPTH (FT)
YR	MO	DY	
83	7	16	6298.93
		17	6298.77
		18	6298.59
		19	6298.33
		20	6298.22
		21	6298.01
		22	6297.83
		23	6297.74
		24	6297.61
		25	6297.45
		26	6297.33
		27	6297.21
		28	6296.89
		29	6296.71
		30	6296.58
		31	6296.45
	8	1	6296.32
		2	6296.16
		3	6296.02
		4	6295.83
		5	6295.65
		6	6295.49
		7	6295.37
		8	6295.27
		9	6295.14
		10	6295.02
		11	6294.85
		12	6294.75
		13	6294.61
		14	6294.45
		15	6294.35
		16	6294.22
		17	6294.11
		18	6293.93
		19	6293.81
		20	6293.67
		21	6293.51
		22	6293.39
		23	6293.25
		24	6293.07
		25	6292.98
		26	6292.92
		27	6292.71
		28	6292.61
		29	6292.51

TABLE 1.2.1.4-11 (cont'd)

```
      CB-TRACT
STEVENS RECORDER WATER LEVELS
LOWER AQUIFER WELLS
FOR SAMPLE DATE SHOWN


                   WELL ID - FT FROM GROUND LEVEL
                      WY44
                   DEPTH
 YR   MO   DY      (FT)
----------------------
 83    8   30   6292.41
           31   6292.28
       9    1   6292.12
            2   6292.05
            3   6291.94
            4   6291.86
            5   6291.69
            6   6291.54
            7   6291.45
            8   6291.31
            9   6291.14
           10   6291.04
           11   6290.93
           12   6290.79
           13   6290.72
           14   6290.64
           15   6290.52
           16   6290.41
           17   6290.34
           18   6290.24
           19   6289.98
           20   6289.82
           21   6289.74
           22   6289.63
           23   6289.53
           24   6289.36
           25   6289.26
           26   6289.21
           27   6289.16
           28   6289.05
           29   6288.97
           30   6288.83
      10    1   6288.75
            2   6288.67
            3   6288.52
            4   6288.37
            5   6288.25
            6   6288.14
            7   6288.04
            8   6287.91
            CB-TRACT
 STEVENS RECORDER WATER LEVELS
  UPPER PARACHUTE - CREEK 1
    FOR SAMPLE DATE SHOWN



                      W012       W043
                     DEPTH      DEPTH
 YR    MO    DY      (FT)       (FT)
---------------------------------------

 83     6     1    6352.24    6623.52
              2    6352.28    6623.11
              3    6352.29    6622.93
              4    6352.45    6622.86
              5    6352.53    6622.69
              6    6352.54    6622.61
              7    6352.59    6622.55
              8    6352.66    6622.52
              9    6352.75    6622.43
             10    6352.80    6622.35
             11    6353.00    6622.46
             12    6353.10    6622.15
             13    6353.04    6621.82
             14    6353.11    6621.79
             15    6353.31    6621.84
             16    6353.48    6621.76
             17    6353.57    6621.69
             18    6353.76    6621.73
             19    6353.92    6621.63
             20    6354.03    6621.43
             21    6354.09    6621.13
             22    6354.09    6621.00
             23    6354.22    6620.95
             24    6354.35    6620.96
             25    6354.49    6620.99
             26    6354.66    6620.95
             27    6354.74    6620.81
             28    6354.84    6620.73
             29    6354.93    6620.77
             30    6355.07    6620.52
        7     1    6355.12    6620.54
              2    6355.21    6620.39
              3    6355.26    6619.98
              4    6355.17    6619.90
              5    6355.22    6619.90
              6    6355.32    6619.97
              7    6355.36    6619.95
              8    6355.41    6619.94
              9    6355.46    6619.98
             10    6355.54    6619.94
             11    6355.54    6619.92
             12    6355.63    6619.95
             13    6355.71    6619.95
             14    6355.80    6620.06
             15    6355.98    6619.99
```

TABLE 1.2.1.4-12 (cont'd)

C-b TRACT
STEVENS RECORDER WATER LEVELS
UPPER PARACHUTE - CREEK 1
FOR SAMPLE DATE SHOWN

YR	MO	DY	W012 DEPTH (FT)	W094 DEPTH (FT)
83	7	16	6356.00	6619.71
		17	6355.98	6619.40
		18	6355.91	6619.16
		19	6355.90	6619.13
		20	6355.89	6619.11
		21	6355.91	6619.11
		22	6355.95	6619.16
		23	6356.00	6618.96
		24	6356.04	6618.95
		25	6356.13	6618.89
		26	6356.17	6618.81
		27	6356.17	6618.65
		28	6356.17	6618.51
		29	6356.17	6618.40
		30	6356.18	6618.30
		31	6356.20	6618.24
	8	1	6356.23	6618.14
		2	6356.24	6618.04
		3	6356.24	6617.88
		4	6356.25	6617.75
		5	6356.21	6617.62
		6	6356.18	6617.60
		7	6356.26	6617.63
		8	6356.32	6617.54
		9	6356.34	6617.35
		10	6356.34	6617.15
		11	6356.34	6617.01
		12	6356.42	6616.87
		13	6356.42	6616.81
		14	6356.41	6616.81
		15	6356.41	6616.81
		16	6356.42	6615.40
		17	6356.40	6616.40
		18	6356.44	6616.42
		19	6356.48	6616.49
		20	6356.47	6616.35
		21	6356.46	6616.22
		22	6356.47	6616.08
		23	6356.47	6615.97
		24	6356.45	6615.86
		25	6356.43	6615.71
		26	6356.44	6615.52
		27	6356.45	6615.48
		28	6356.47	6615.43
		29	6356.48	6615.42

TABLE 1.2.1.4-12 (cont'd)

CB-TRACT
STEVENS RECORDER WATER LEVELS
UPPER PARACHUTE - CREEK 1
FOR SAMPLE DATE SHOWN.

YR	MO	DY	W012 DEPTH (FT)	W046 DEPTH (FT)
83	8	30	6355.49	6615.38
		31	6355.49	6615.28
	9	1	6356.48	6615.19
		2	6355.51	6615.10
		3	6355.53	6615.08
		4	6355.59	6615.09
		5	6356.59	6615.05
		6	6355.54	6615.10
		7	6355.57	6614.82
		8	6355.54	6614.76
		9	6356.59	6614.76
		10	6355.55	6614.75
		11	6355.55	6614.63
		12	6355.56	6614.42
		13	6355.54	6614.30
		14	6355.55	6614.23
		15	6355.57	6614.15
		16	6355.57	6614.15
		17	6355.61	6614.09
		18	6355.62	6614.01
		19	6356.54	6614.02
		20	6355.43	6613.95
		21	6355.47	6613.92
		22	6355.53	6613.45
		23	6355.53	6613.49
		24	6356.56	6613.51
		25	6355.52	6613.45
		26	6355.52	6613.43
		27	6355.60	6613.28
		28	6355.64	6613.24
		29	6355.54	6613.32
		30	6356.55	6613.32
	10	1	6356.51	6613.30
		2	6356.57	6613.23
		3	6355.60	6613.09
		4	6355.46	6613.10
		5	6355.46	6612.93
		6	6355.41	6612.68
		7	6356.39	6612.59
		8	6355.34	6612.55
		9	6355.30	6612.50
		10	6355.27	6612.45
		11	6355.15	6612.38
		12	6355.09	6612.35
		13	6356.10	6612.18

TABLE 1.2.1.4-12 (cont'd)

CB-TRACT
STEVENS RECORDER WATER LEVELS
UPPER PARACHUTE - CREEK 1
FOR SAMPLE DATE SHOWN

YR	MO	DY	W012 DEPTH (FT)	W040 DEPTH (FT)
83	10	14	6355.22	5612.05
		15	6356.06	5612.01
		16	6355.96	5612.26
		17	6355.95	5612.08
		18	6355.93	5611.86
		19	6355.84	5611.79
		20	6355.79	5611.76
		21	6355.72	5611.55
		22	6355.72	5611.49
		23	6355.73	5611.20
		24	6355.53	5611.20
		25	6355.53	
		26	6355.55	
		27	6355.63	

TABLE 1.2.1.4-13

CB-TRACT
STEVENS RECORDER WATER LEVELS FOR LOWER PARACHUTE CREEK
FOR SAMPLE DATE SHOWN

WG - LPC3

YR	MO	DY	4612 DEPTH (FT)
83	6	1	6269.33
		2	6269.32
		3	6269.46
		4	6269.26
		5	6269.14
		6	6269.04
		7	6268.93
		8	6268.93
		9	6268.85
		10	6268.76
		13	6261.50
		14	6263.52
		15	6264.47
		16	6264.71
		17	6264.75
		18	6264.75
		19	6264.75
		20	6264.82
		21	6265.51
		22	6265.75
		23	6265.32
		24	6265.84
		25	6266.01
		26	6266.10
		27	6266.13
		28	6266.15
		29	6266.16
		30	6267.38
	7	1	6267.55
		2	6267.58
		3	6267.53
		4	6267.53
		5	6268.80
		6	6268.91
		7	6269.00
		8	6269.04
		9	6269.04
		10	6269.05
		11	6269.05
		12	6269.05
		13	6269.06
		14	6269.07
		25	6266.00
	8	18	6271.00

TABLE 1.2.1.4-13 (cont'd)

```
     CB-TRACT
STEVENS RECORDER WATER LEVELS FOR LOWER PARACHUTE CREEK
FOR SAMPLE DATE SHOWN

WG - LPC3


                      4G12
                     DEPTH
 YR   MO   DY    (FT)
------------------------
 83    8   19   6272.57
           20   6272.73
           21   6272.56
           22   6272.57
           23   6272.57
           24   6272.64
           25   6272.58
           26   6272.59
           27   6272.53
           28   6272.58
           29   6272.57
           30   6272.56
           31   6272.51
       9    1   6272.49
            2   6272.48
            3   6272.47
            4   6272.49
            5   6272.47
            6   6272.39
            7   6272.39
            8   6272.37
            9   6272.34
           10   6272.25
           11   6272.24
           12   6272.21
           13   6272.15
           14   6272.16
           15   6272.11
           16   6272.08
           17   6272.09
           18   6272.06
           19   6271.95
           20   6271.78
           21   6271.81
           22   6271.82
           23   6271.78
           24   6271.75
           25   6271.68
           26   6271.67
           27   6271.71
           28   6271.69
           29   6271.66
           30   6271.66
      10    1   6271.59
```

TABLE 1.2.1.4-13 (cont'd)

```
     CB-TRACT
STEVENS RECORDER WATER LEVELS FOR LOWER PARACHUTE CREEK
FOR SAMPLE DATE SHOWN

WG - LPC3


                 WG12
              DEPTH
 YR   MO   DY   (FT)
---------------------
 83   10    2  6271.64
            3  6271.60
            4  6271.51
            5  6271.49
            6  6271.47
            7  6271.46
            8  6271.43
            9  6271.41
           10  6271.41
           11  6271.35
           12  6271.24
           13  6271.29
           14  6271.41
           15  6271.45
           16  6271.37
           17  6271.36
           18  6271.36
           19  6271.34
           20  6271.32
           21  6271.25
           22  6271.23
           23  6271.23
           24  6271.14
           25  6271.09
           26  6271.08
           27  6271.08
           28  6271.03
```

TABLE 1.2.1.4-14

LIST OF BEDROCK WELL LEVELS TIME SERIES PLOTS

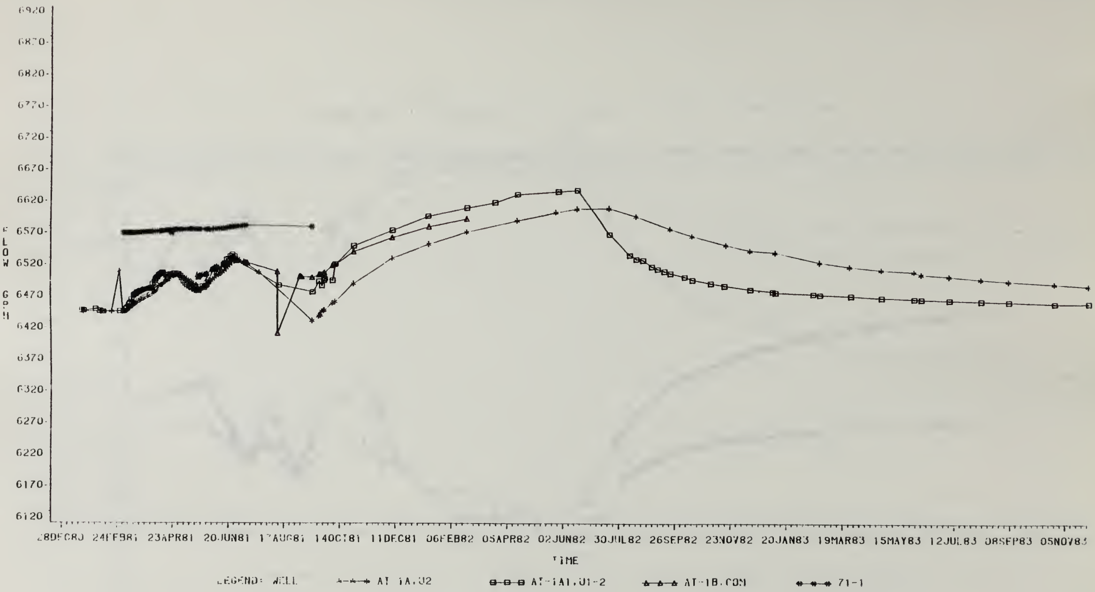
Well	Computer Code	Page No.
AT-1A	WV37	I-129
AT-1A-1	WX38	I-129
AT-1B	WV40	I-129
71-1	C201	I-129
AT-1C-1	WY45	I-130
AT-1C-2	WY46	I-130
AT-1C-3	WX44	I-130
AT-1	WY44	I-131
AT-1D-1	WG41	I-131
AT-1D-2	WE41	I-131
AT-1D-3	WD41	I-131
CB-1	WD01	I-132
CB-2	WD02	I-133
CB-3	WE03	I-133
SG-19	WD19	I-133
CB-4	WE04	I-134
SG-10	WD90	I-134
SG-17A	WD57	I-134
31X12	WW22	I-134
41X13	WW13	I-134
SG-1A-1	WE11	I-135
SG-1A-2	WD11	I-135
SG-1-1	WG12	I-136
SG-1-2	WD12	I-136
SG-6-1	WE61	I-137
SG-6-2	WG61	I-137
SG-6-3	WD61	I-137
SG-8	WY81	I-138
SG-9-1	WG91	I-139
SG-9-2	WE91	I-139
SG-9-3	WD91	I-139
SG-9-4	WC91	I-139
SG-10A-Annul~~a~~us	WD51	I-140
SG-10A-1	WG51	I-140
SG-10A-2	WE51	I-140
SG-11-1	WG52	I-141
SG-11-2	WE52	I-141
SG-11-3	WD52	I-141

TABLE 1.2.1.4-14 (Contd)

LIST OF BEDROCK WELL LEVELS TIME SERIES PLOTS

Well	Computer Code	Page No.
SG-17-1	WE17	I-142
SG-17-2	WG17	I-142
SG-17-3	WD17	I-142
SG-17-4	WC17	I-142
SG-18A-1	WG18	I-143
SG-18A-2	WE18	I-143
SG-18A-3	WD18	I-143
SG-20-2	WE20	I-144
SG-20-3	WD20	I-144
SG-21-1	WH21	I-145
SG-21-2	WG21	I-145
SG-21-3	WE21	I-145
SG-21-4	WD21	I-145
14X-7-1	WD14	I-146
14X-7-2	WD15	I-146
21X-12-1	WG23	I-147
21X-12-2	WC23	I-148
22X-1-2	WD22	I-149
22X-1-3	WC22	I-150
32X-12	WX32	I-151
43X-2-1	WG43	I-152
43X-2-2	WE43	I-153

CB WELL LEVELS DATA



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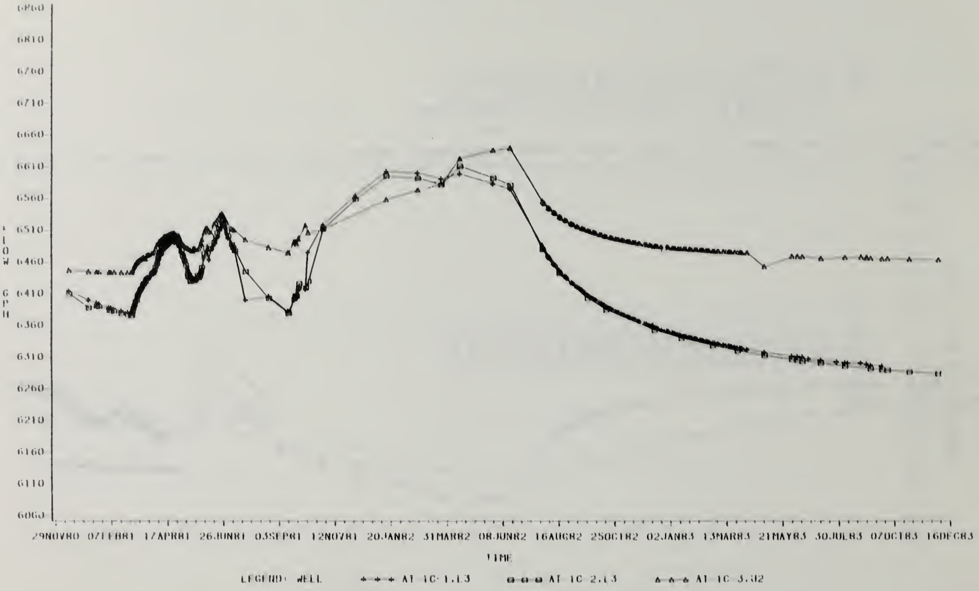

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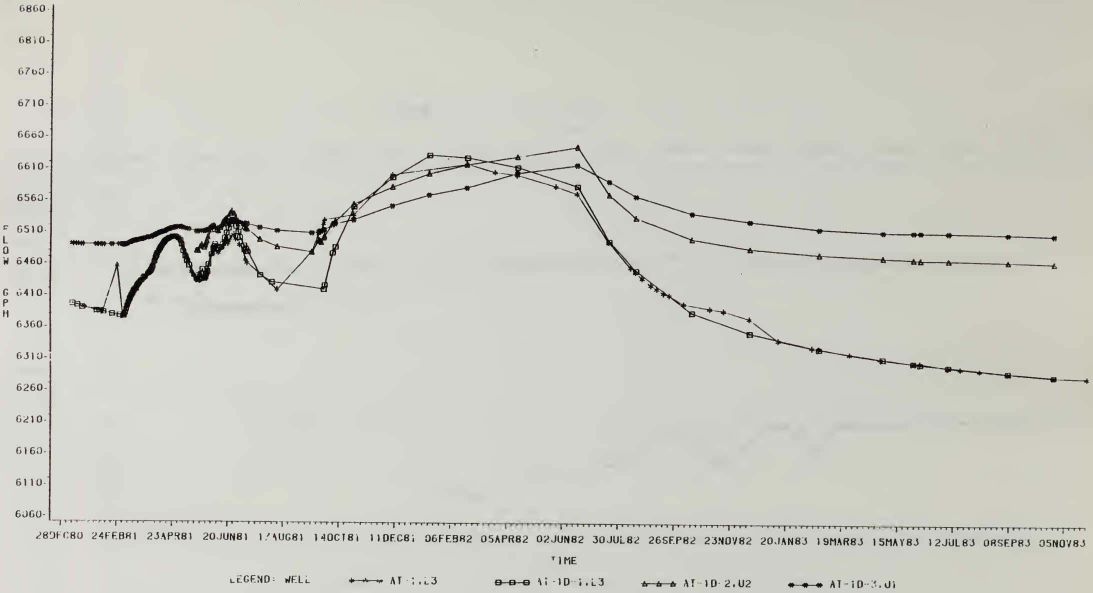

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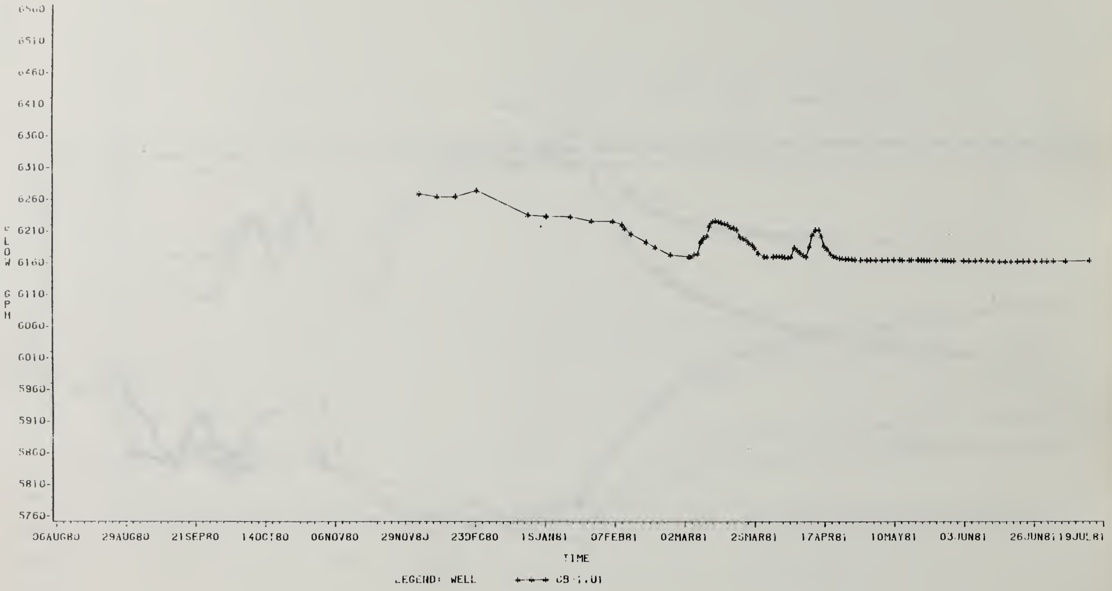

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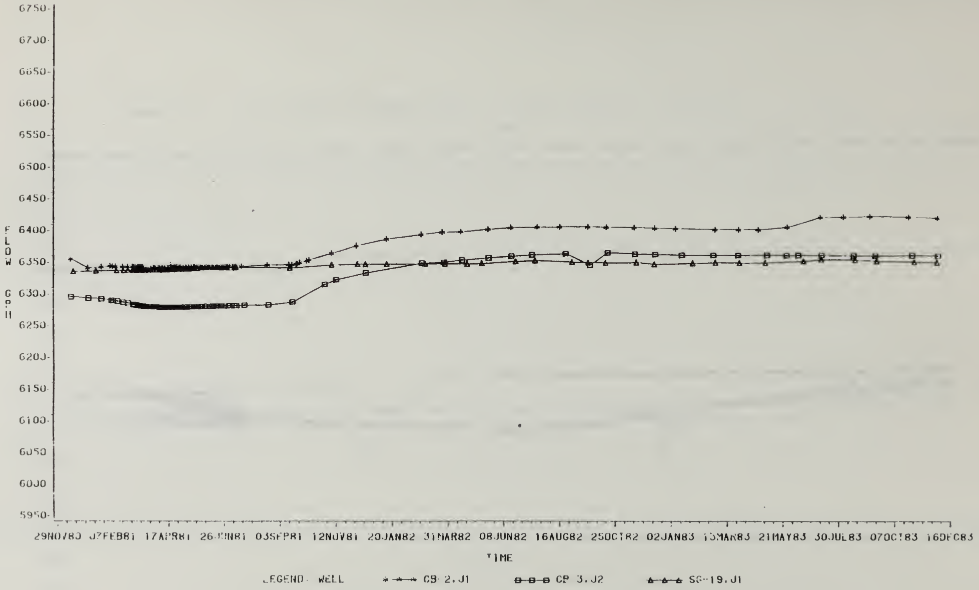

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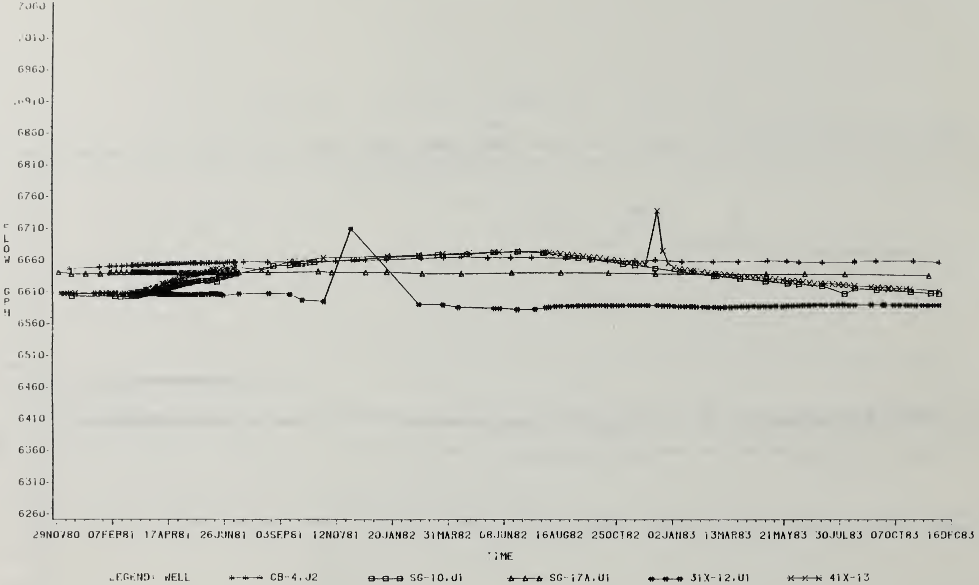

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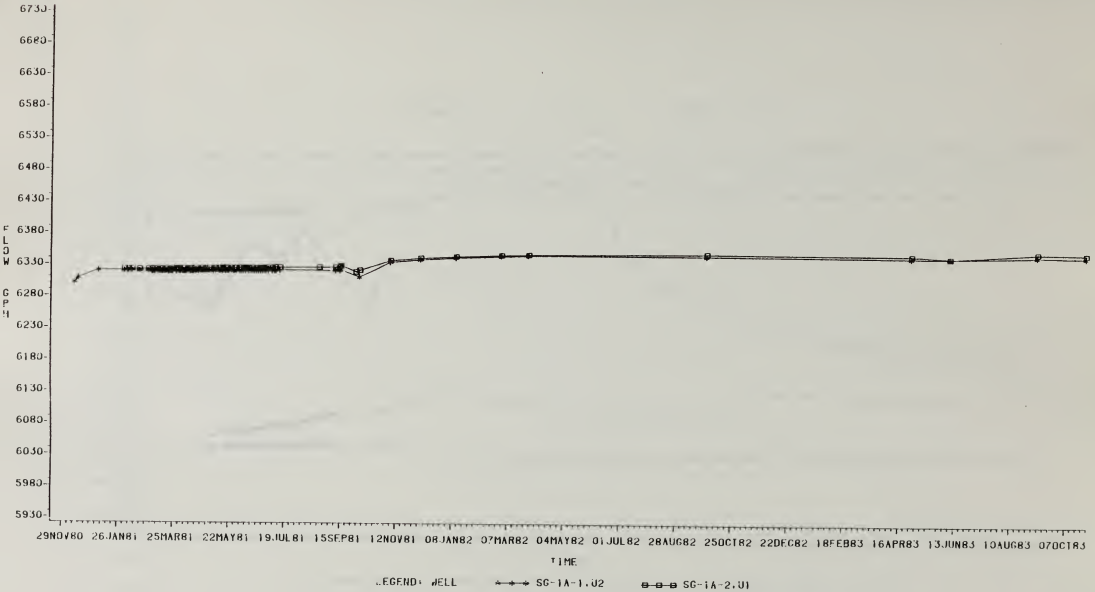

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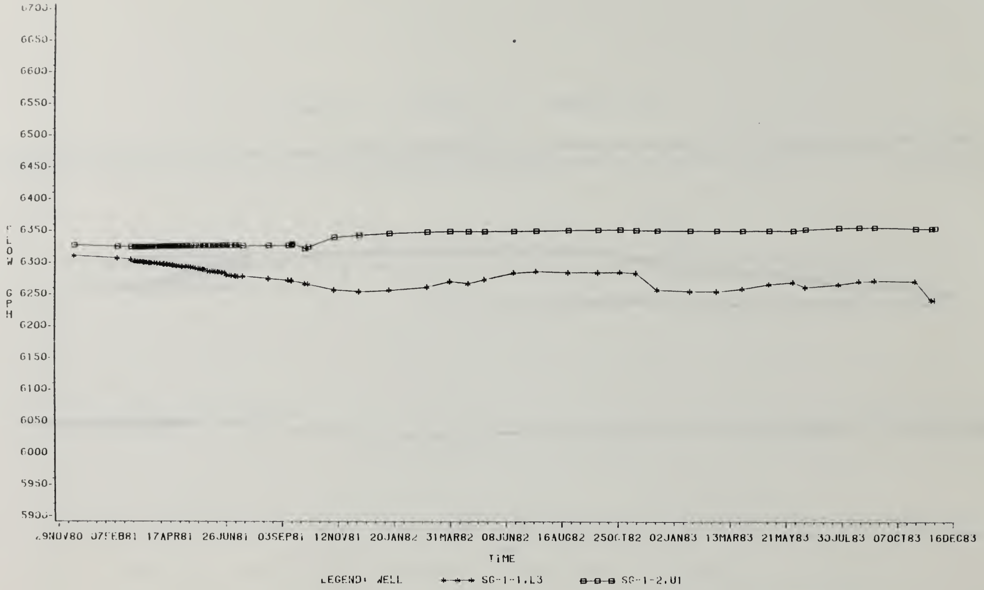

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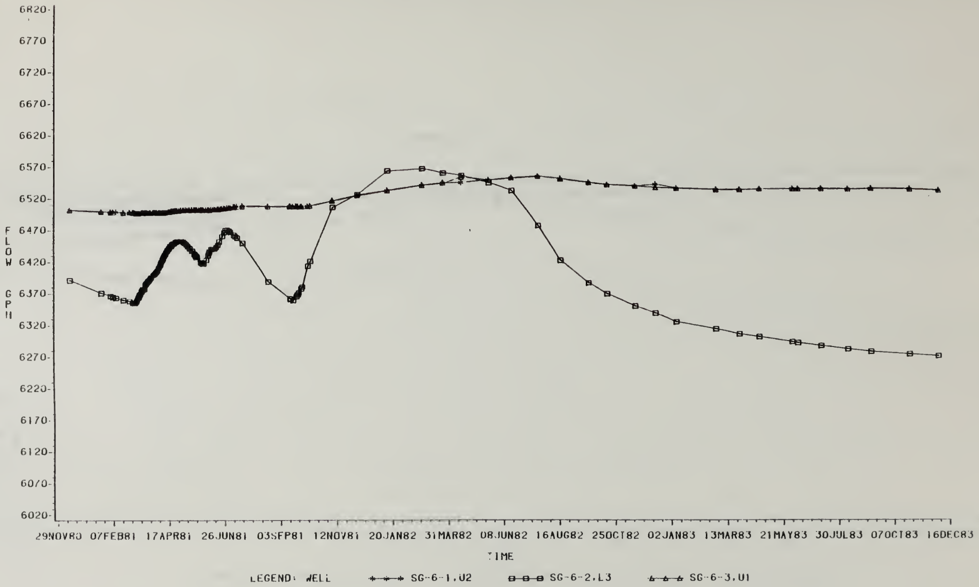

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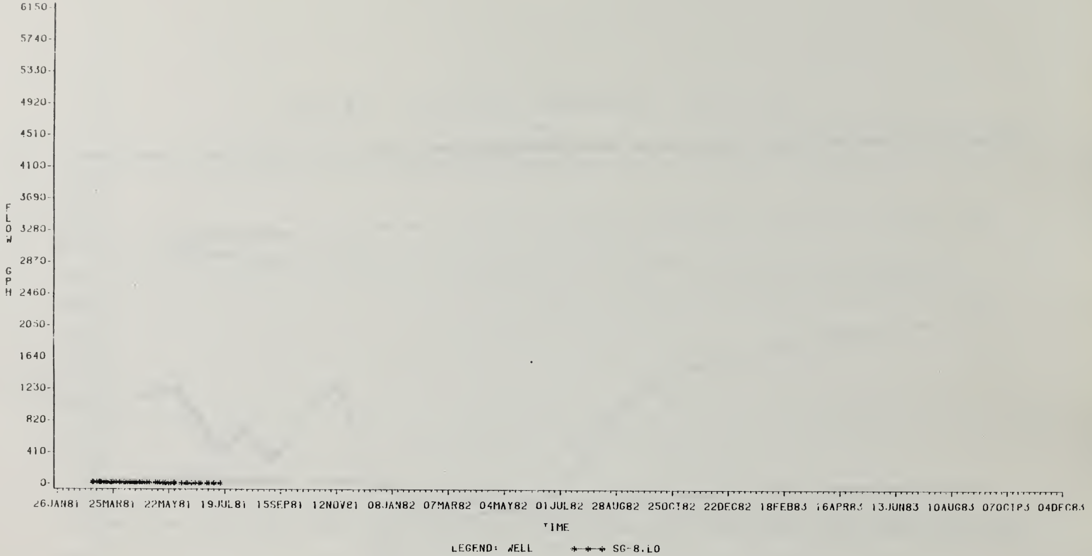

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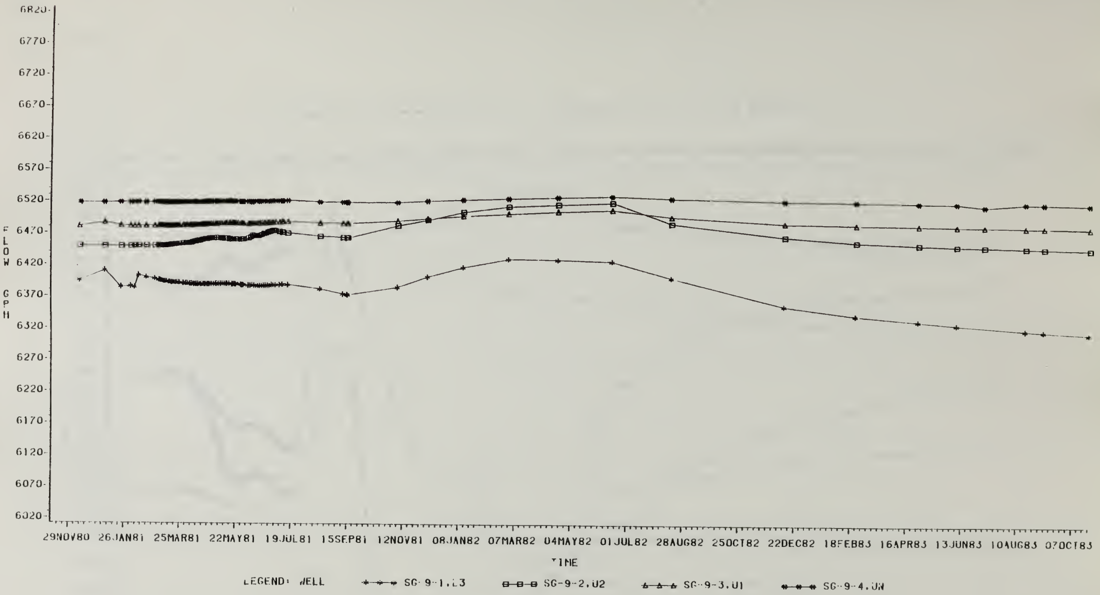

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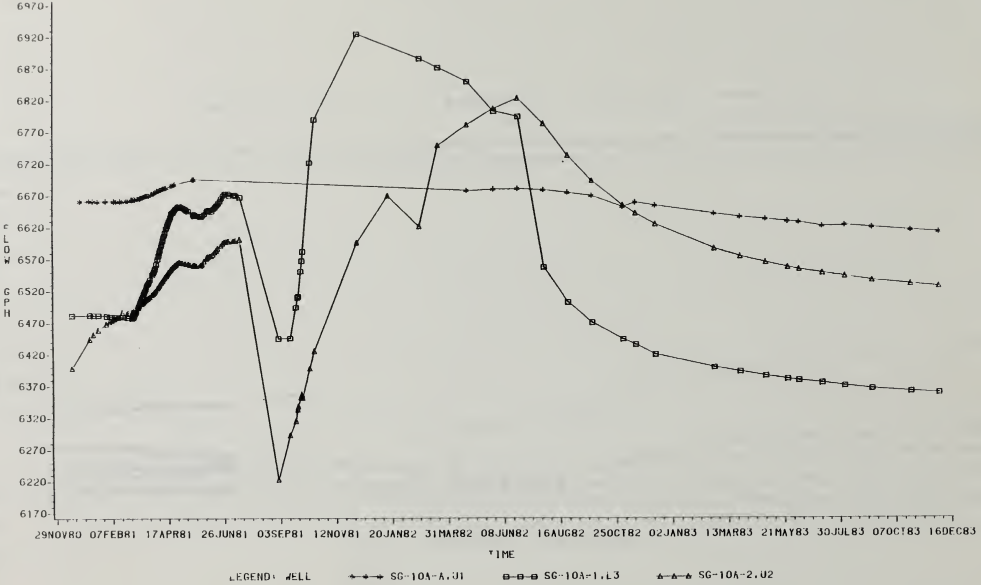

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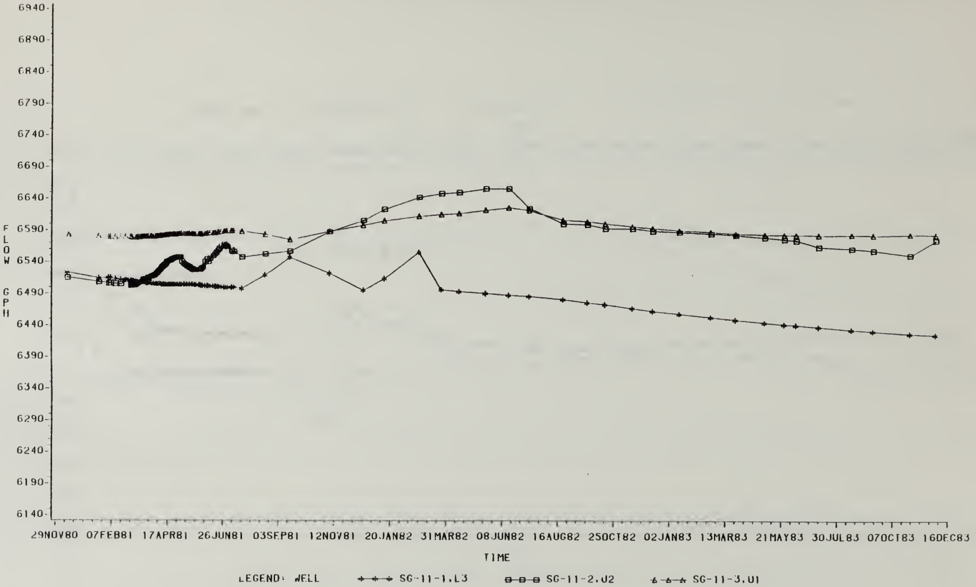

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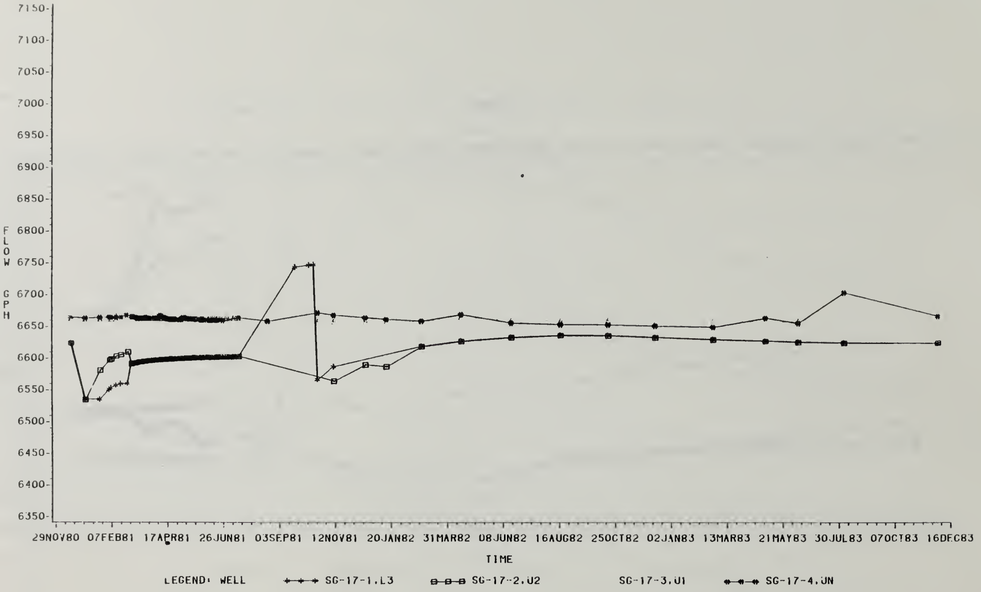

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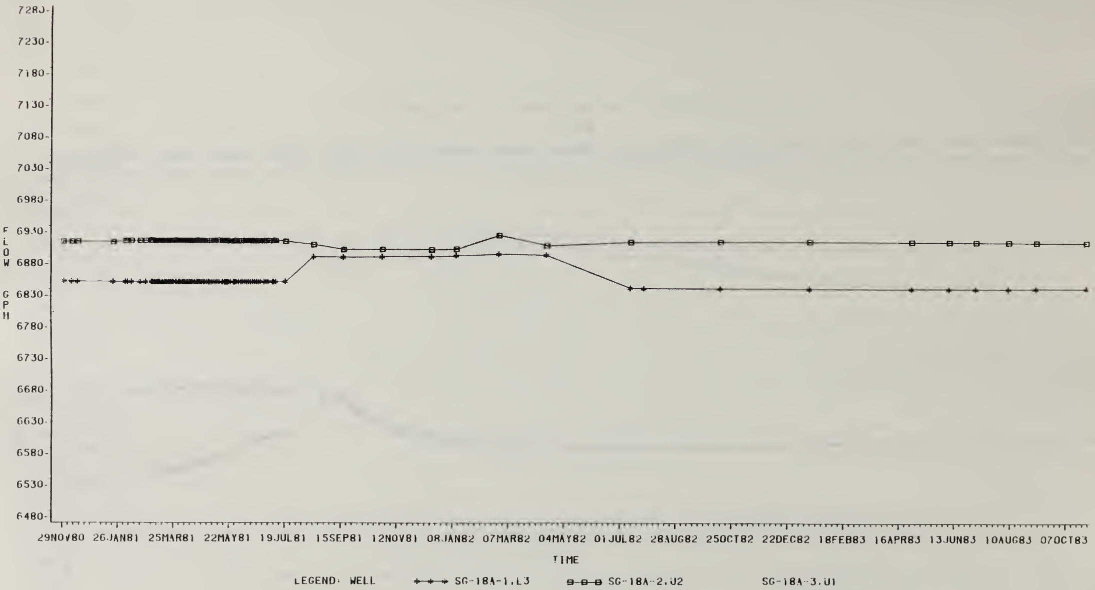

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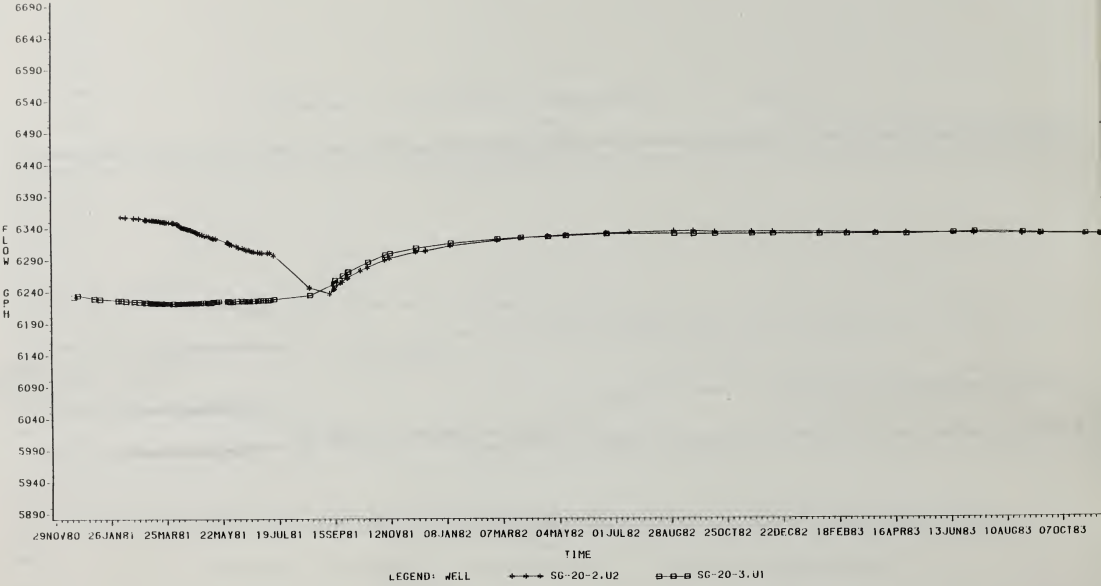

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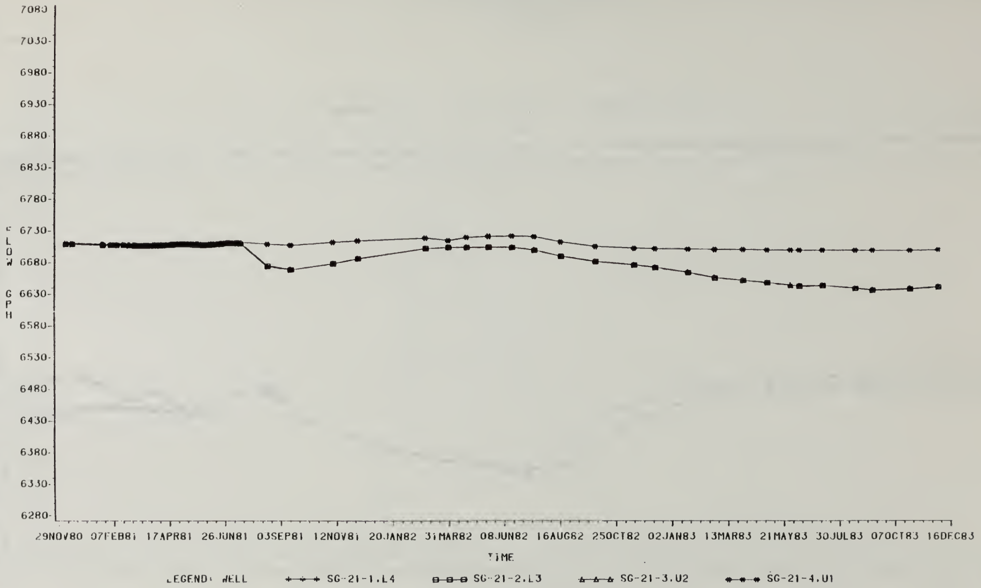

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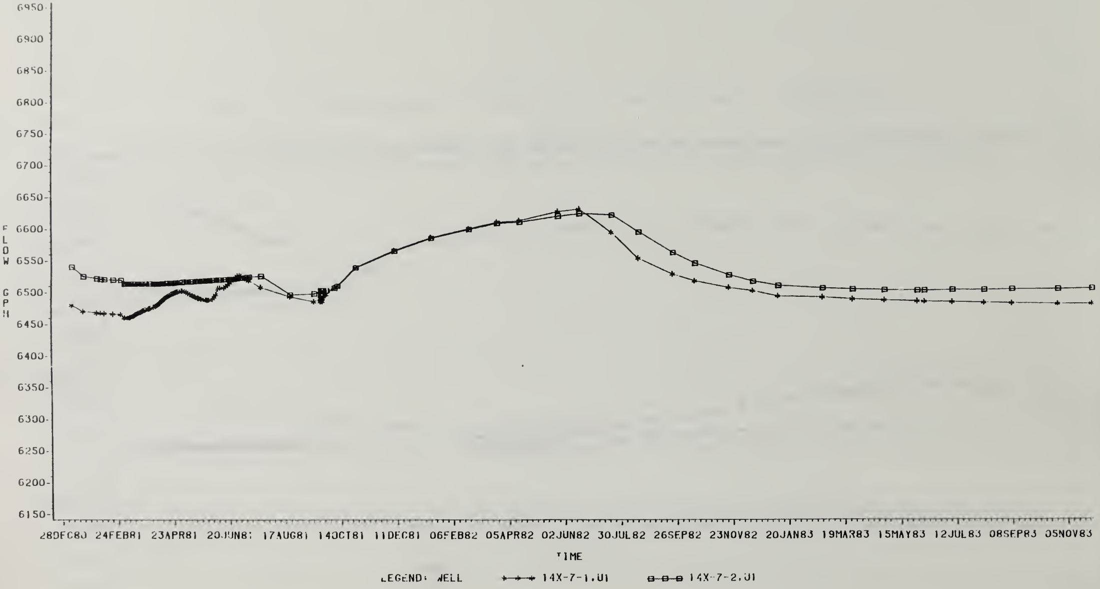
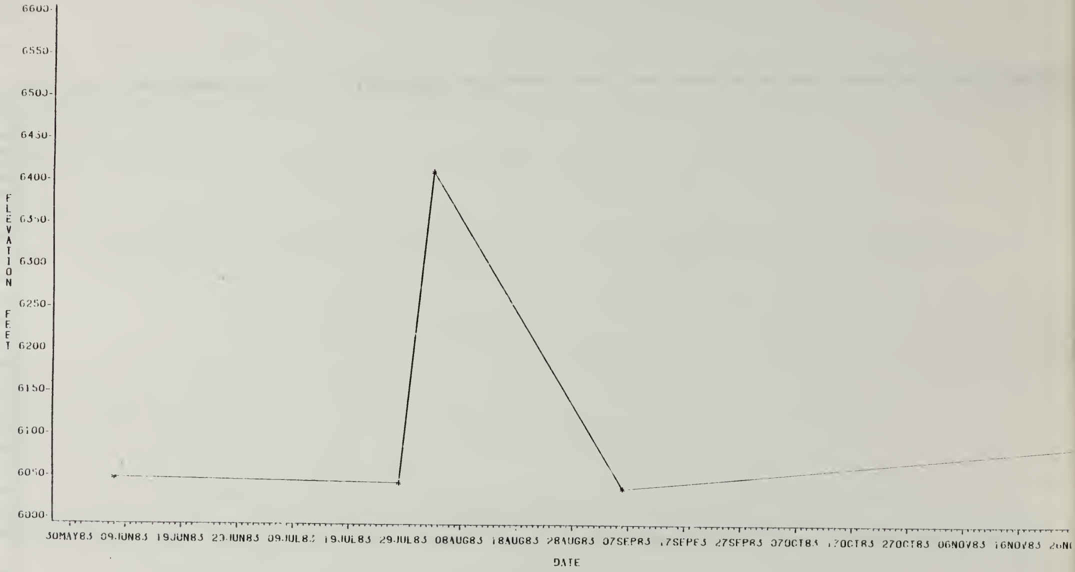


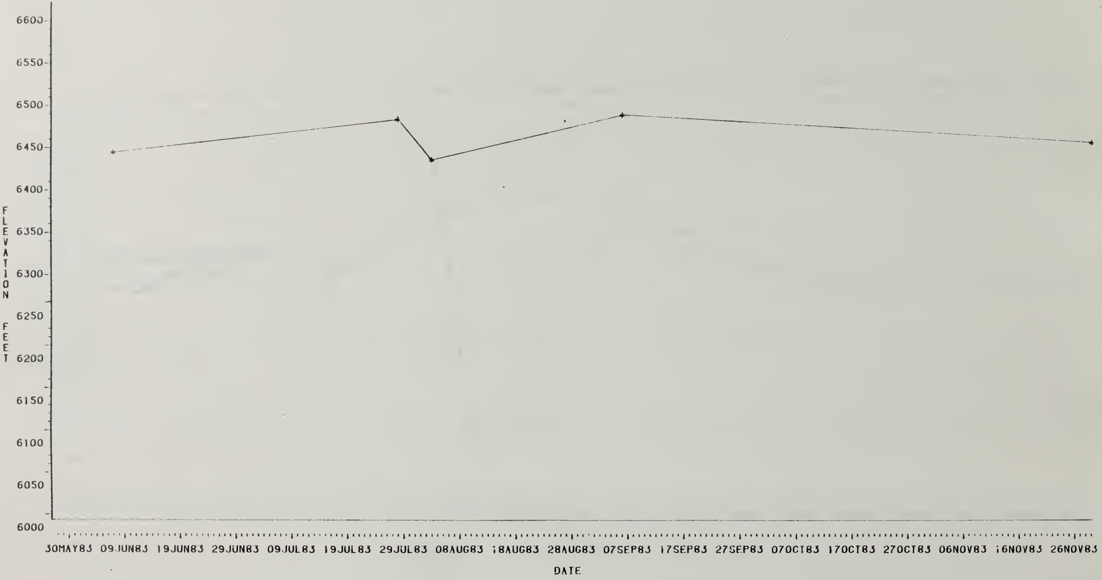
C--B WELL LEVELS

LOC-WG23



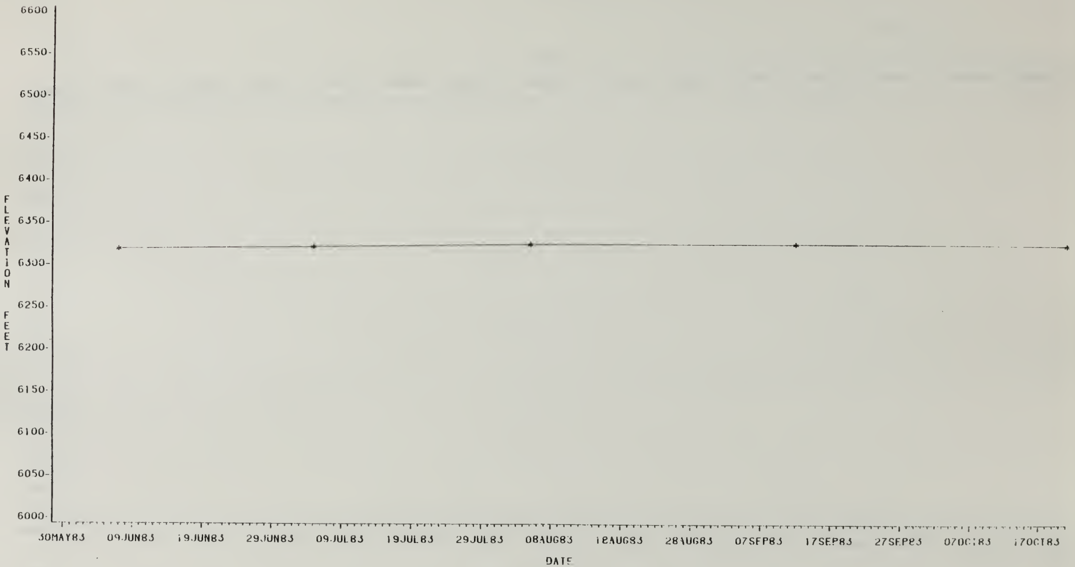
C--B WELL LEVELS

LOC=WC23



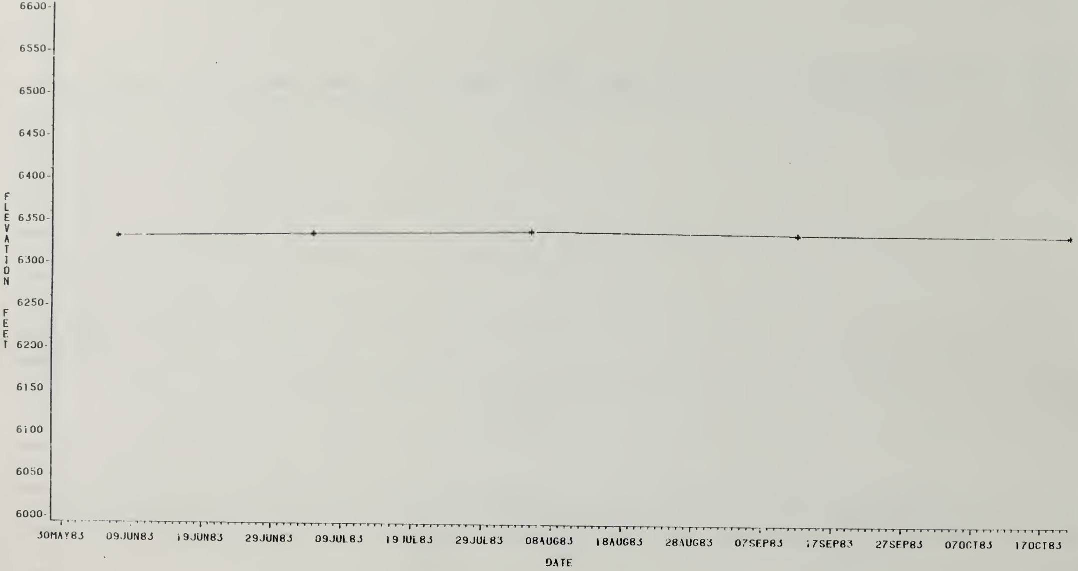
C-B WELL LEVELS

LOC=WD22



C--B WELL LEVELS

LOC=WC22



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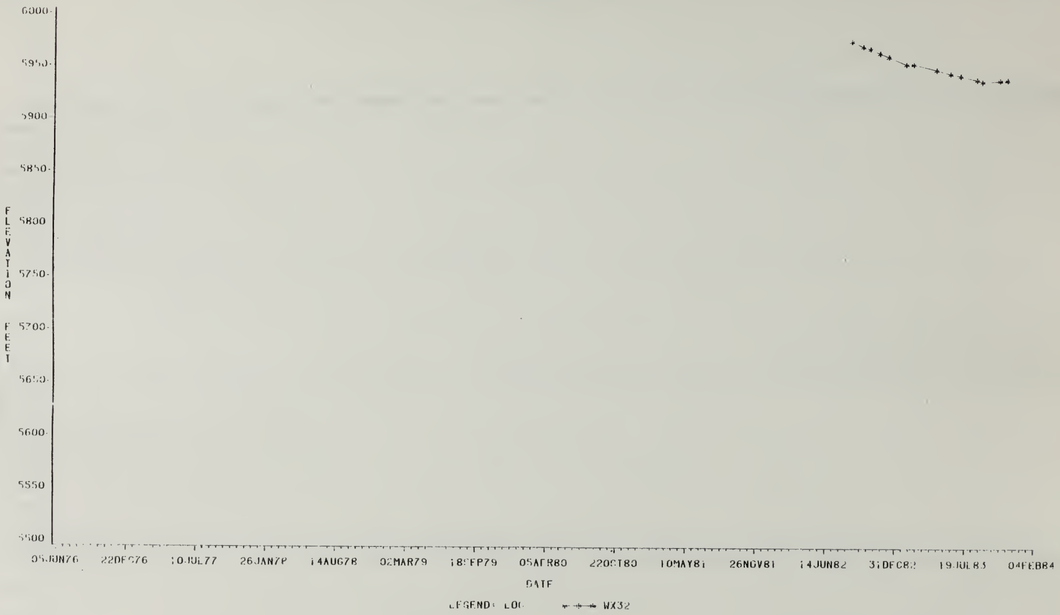
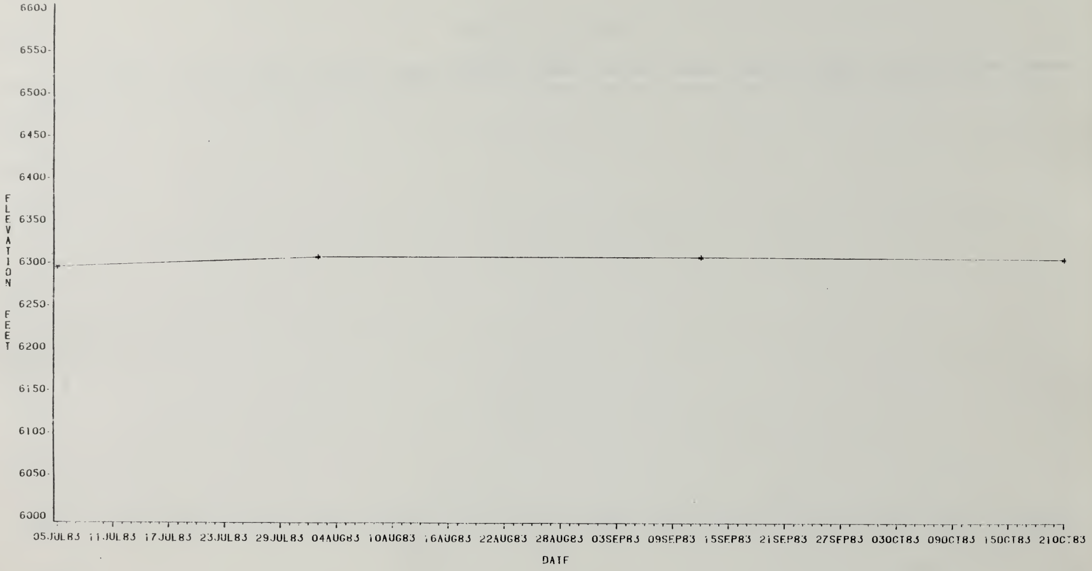


C -B WELL LEVELS

LOC WG43



C-B WELL LEVELS

LOC=WE43

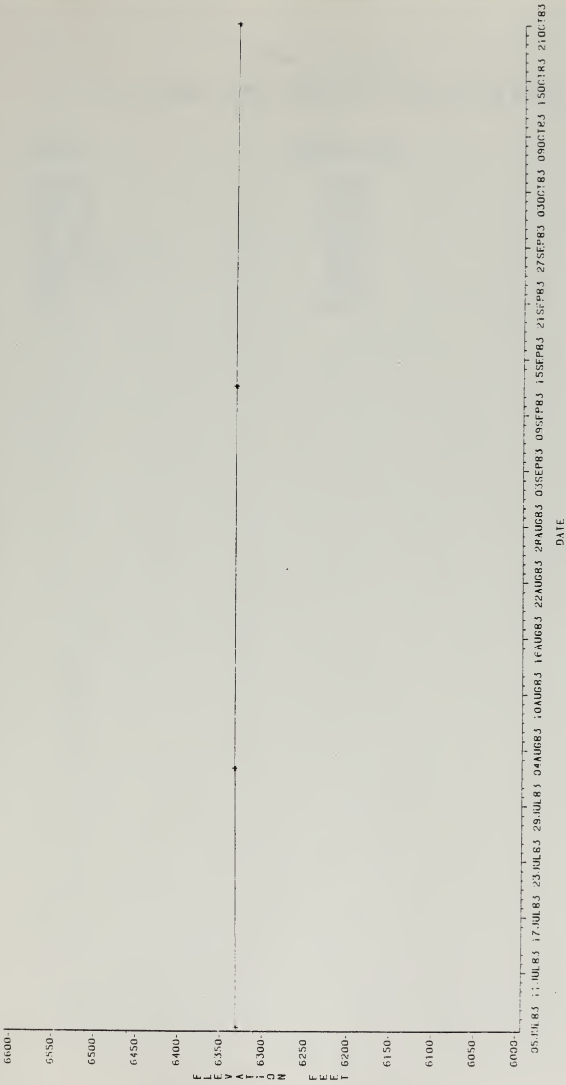


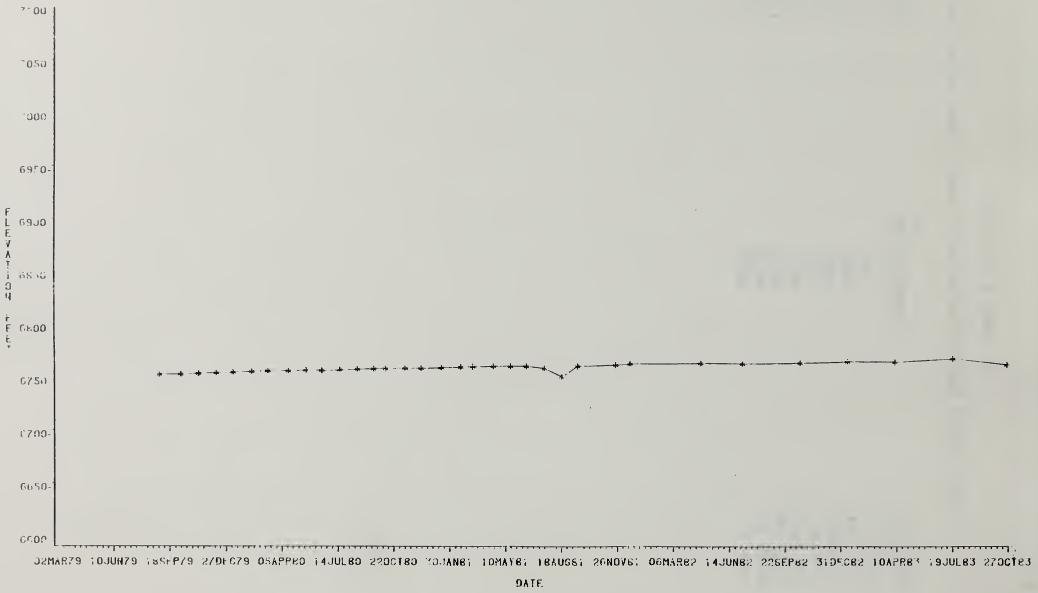
TABLE 1.2.1.4-15

List of Upper Aquifer Bedrock Well Levels Times Series Plots

Well No.	Computer Code	Page No.
TH75-5A	WX64	I-156
TH75-13A	WX65	I-157
TH75-18A	WX67	I-158
TH75-9A	WX69	I-159
CER RB-D-02	WX71	I-160
TH75-15A	WX72	I-161
UNION 8-1	WX73	I-162
TH-5	WX75	I-163

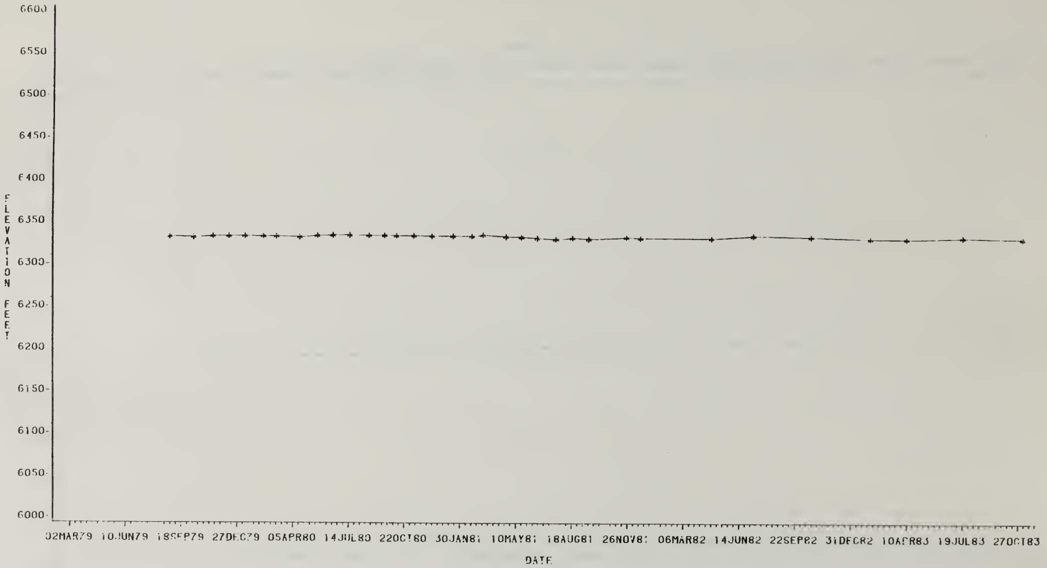
WATER LEVEL PLOTS OF UPPER AQUIFER WELLS

REQUIRED BY WATER AUGMENTATION PLAN
LOC=WX64



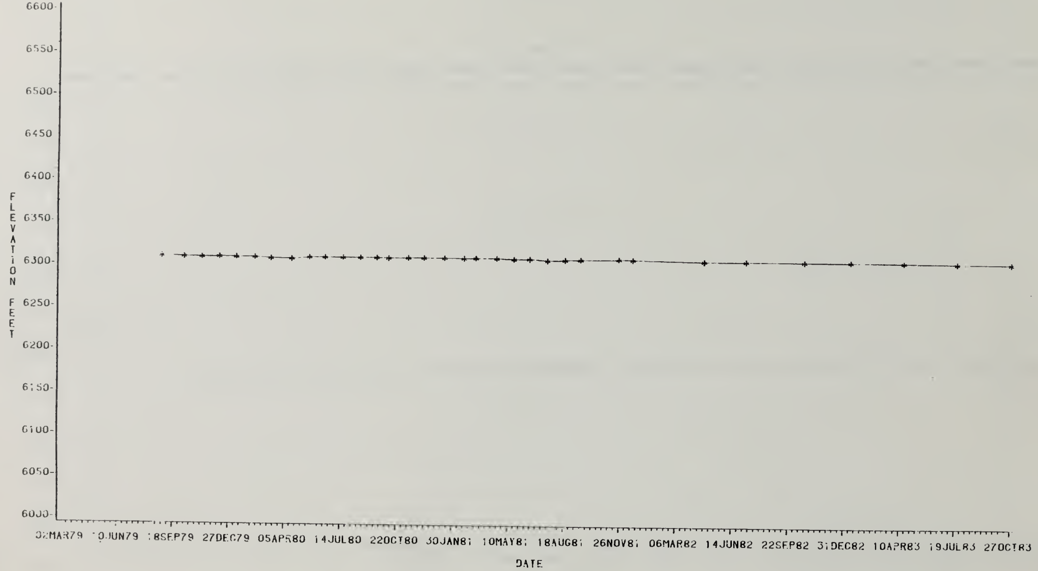
WATER LEVEL PLOTS IN UPPER AQUIFER WELLS

REQUIRED BY WATER AUGMENTATION PLAN
LOC=WX65



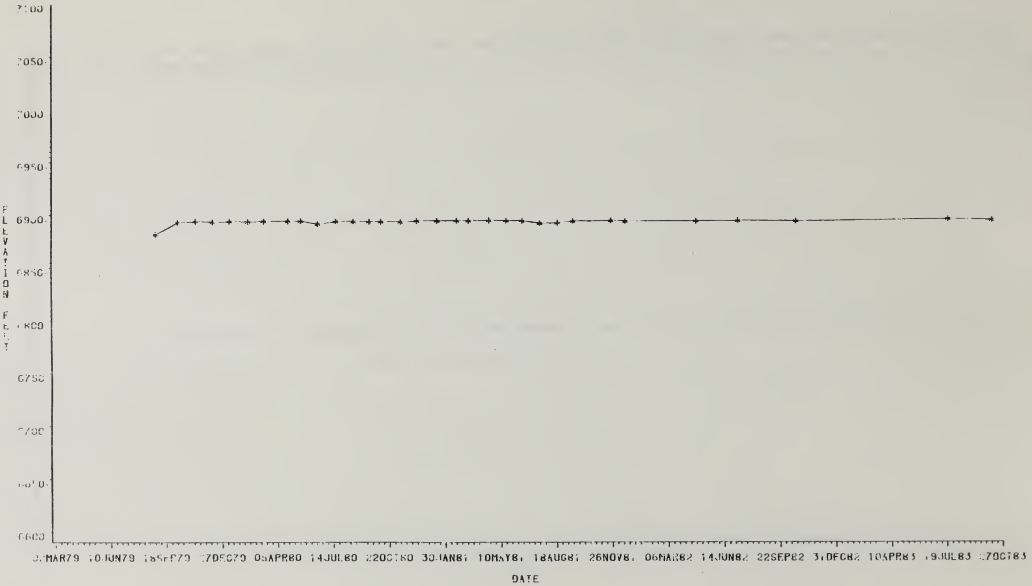
WATER LEVEL PLOTS IN UPPER AQUIFER WELLS

REQUIRED BY WATER AUGMENTATION PLAN
LOC=WX67



WATER LEVEL PLOTS OF UPPER AQUIFER WELLS

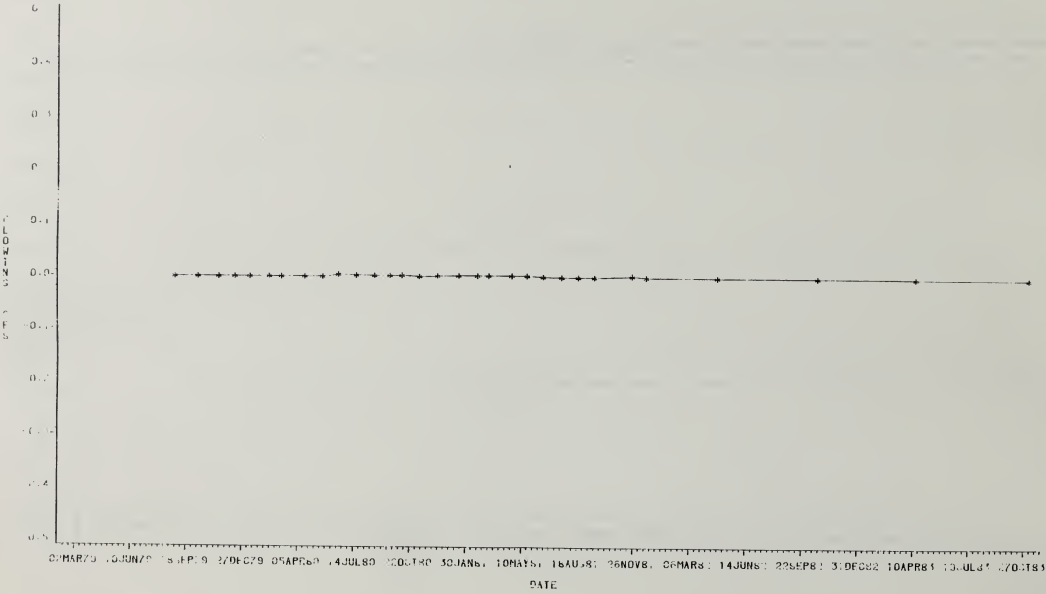
REQUIRED BY WATER AUGMENTATION PLAN
LOC=WX60



WATER LEVEL PLOTS OF UPPER AQUIFER WELLS

REQUIRED BY WATER AUGMENTATION PLAN

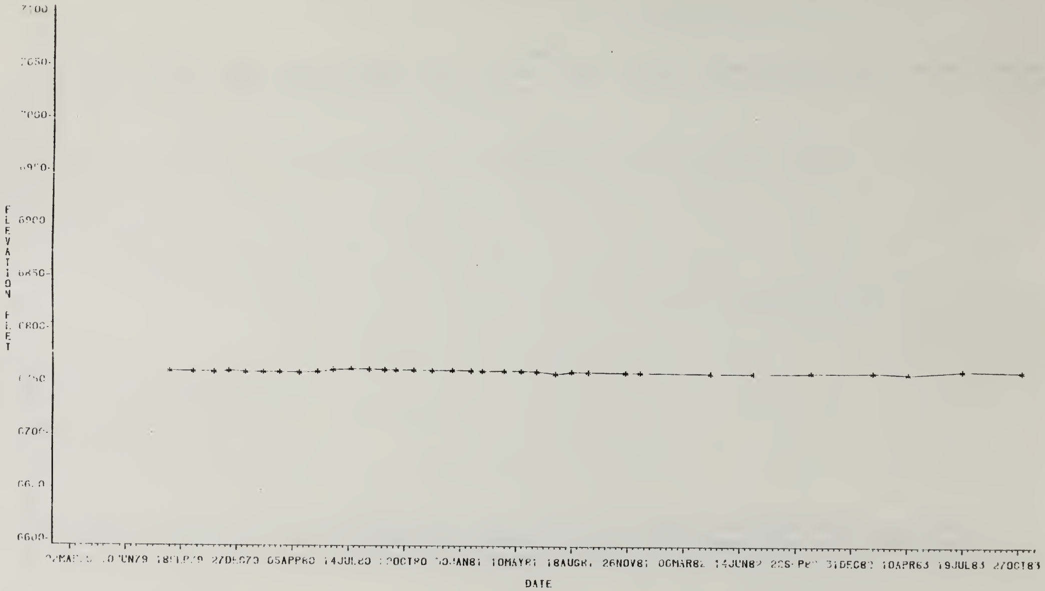
LO7WX71



WATER LEVEL PLOTS OF UPPER AQUIFER WELLS

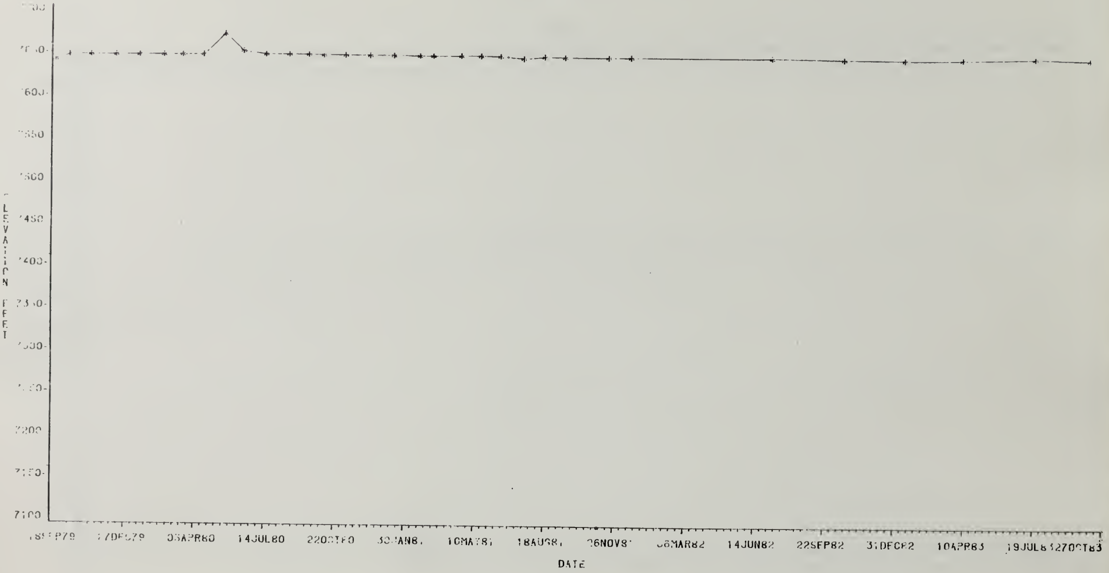
REQUIRED BY WATER AUGMENTATION PLAN

LOC=WX72



WATER LEVEL PLOTS OF UPPER AQUIFER WELLS

REQUIRED BY WATER AUGMENTATION PLAN
LOC=WX73



WATER LEVEL PLOTS OF UPPER AQUIFER WELLS

REQUIRED BY WATER AUGMENTATION PLAN

LOC=WK75

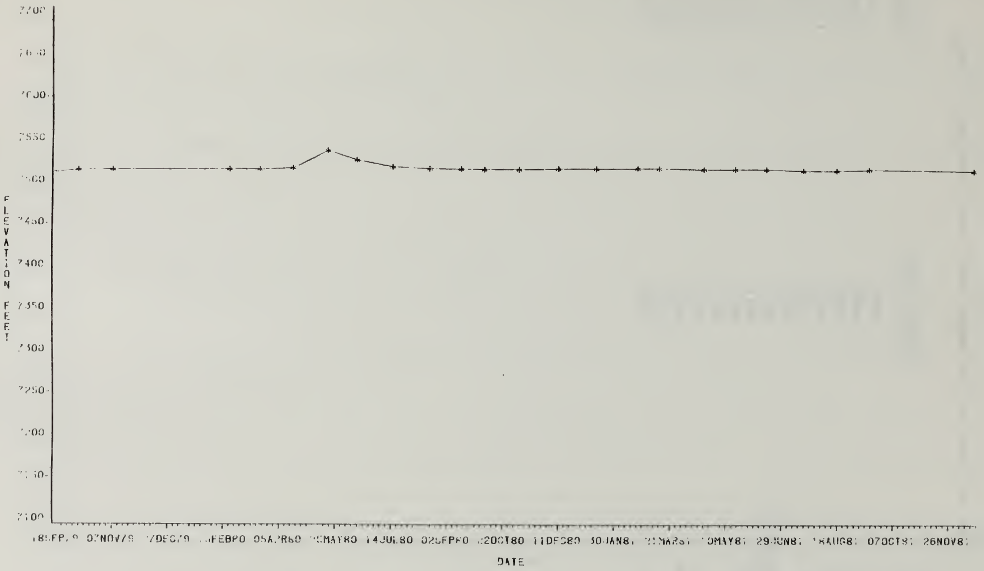
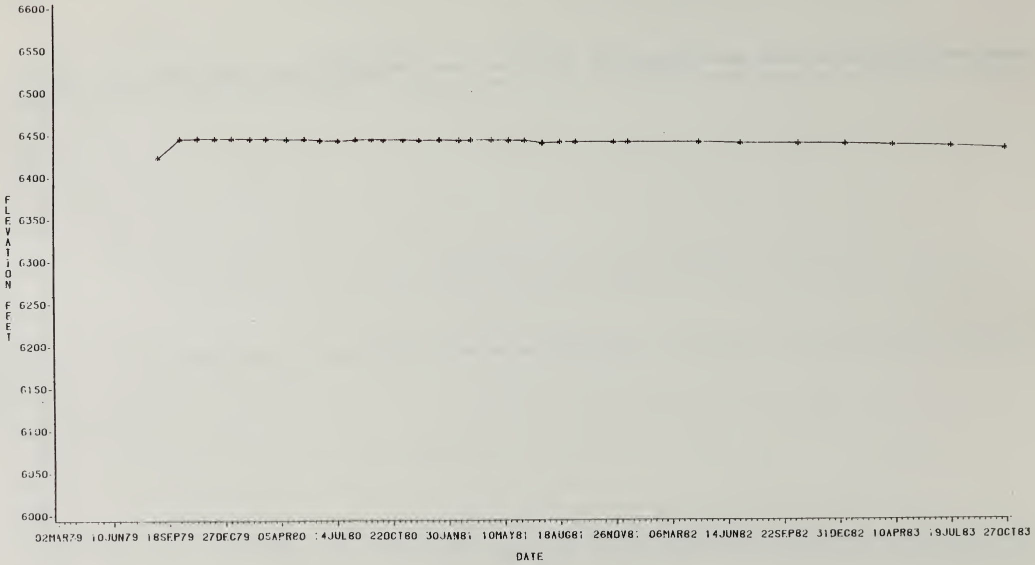


TABLE 1.2.1.4-16

List of Lower Aquifer Bedrock Well Level Time Series Plots

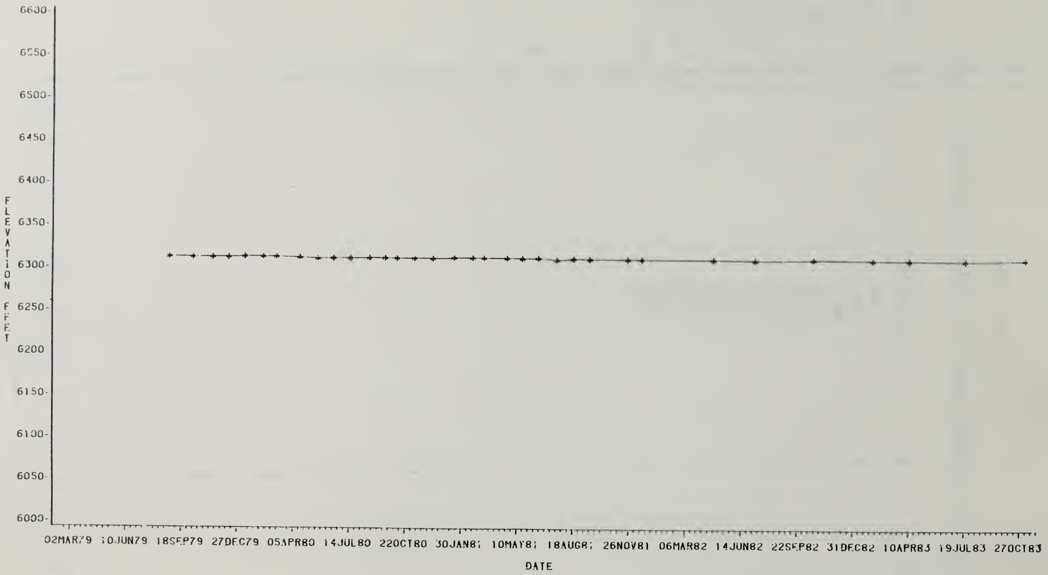
Well No.	Computer Code	Page No.
TH75-5B	WY64	I-165
TH75-13B	WY65	I-166
EQUITY-1	WY66	I-167
TH75-18B	WY67	I-168
TH75-10B	WY68	I-169
TH75-9B	WY69	I-170
EQUITY-SULFUR-1A	WY70	I-171
CER RB-D-03	WY71	I-172
TH75-15B	WY72	I-173
TG71-3	WY75	I-174
TG71-5	WY76	I-175
GETTY 9-40	WY77	I-176
TG71-4	WY78	I-177
EQUITY BS-13	WY79	I-178

WATER LEVEL PLOTS IN LOWER AQUIFER WELLS
Required By Water Augmentation Plan
LOC=WY64



WATER LEVEL PLOTS IN LOWER AQUIFER WELLS

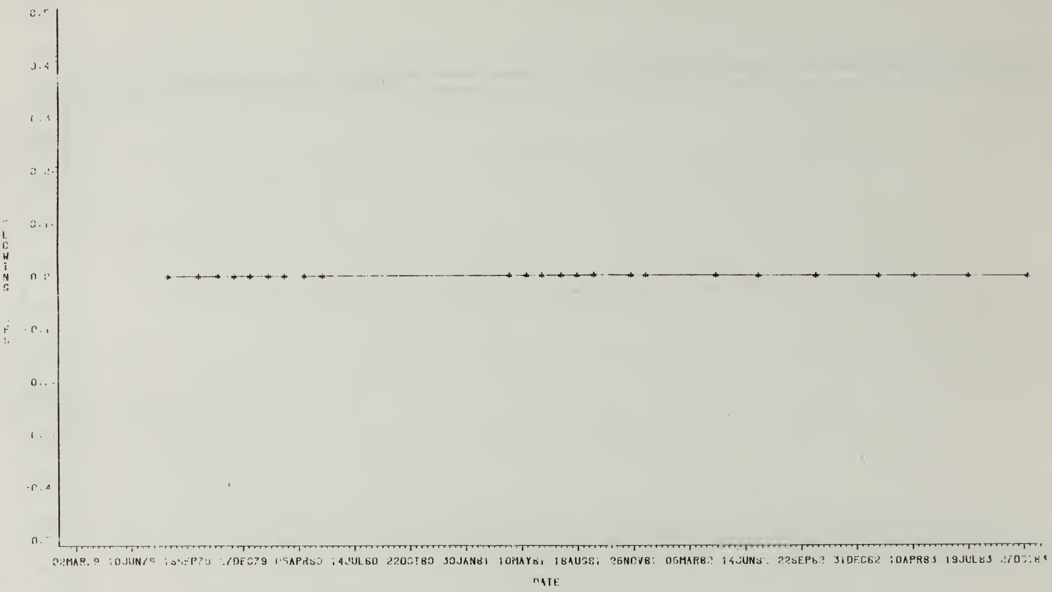
REQUIRED BY WATER AUGMENTATION PLAN
LOC=WY65



WATER LEVEL PLOTS OF LOWER AQUIFER WELLS

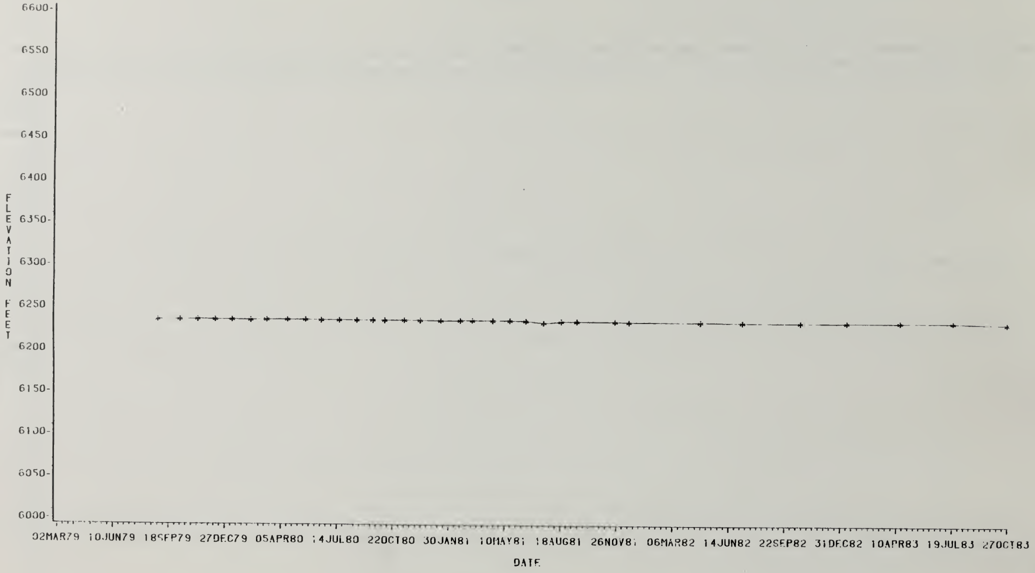
REQUIRED BY WATER AUGMENTATION PLAN

LOC=WY66



WATER LEVEL PLOTS IN LOWER AQUIFER WELLS

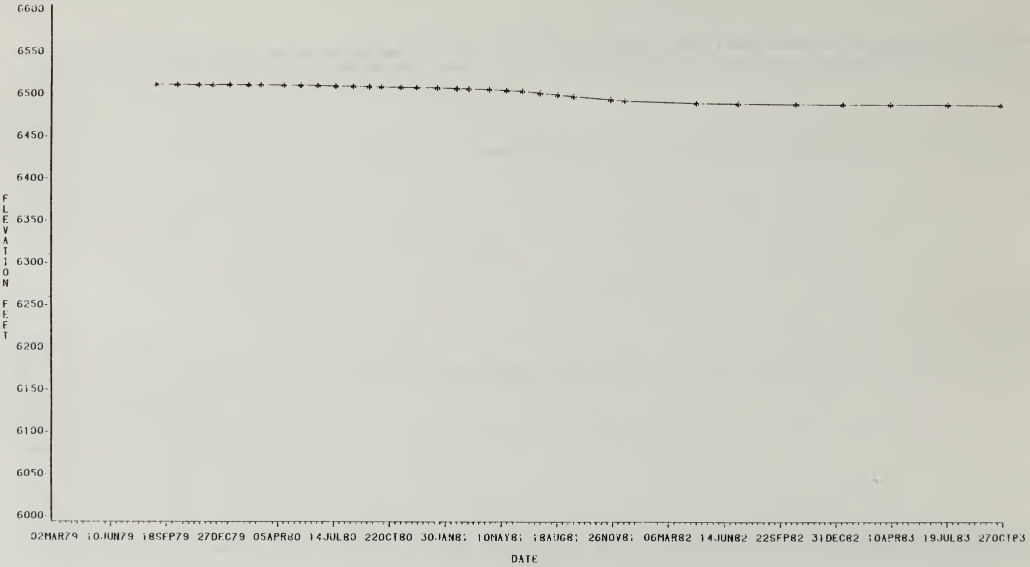
REQUIRED BY WATER AUGMENTATION PLAN
LOC=WY67



WATER LEVEL PLOTS IN LOWER AQUIFER WELLS

REQUIRED BY WATER AUGMENTATION PLAN

LOC-WY6R



WATER LEVEL PLOTS OF LOWER AQUIFER WELLS

REQUIRED BY WATER AUGMENTATION PLAN

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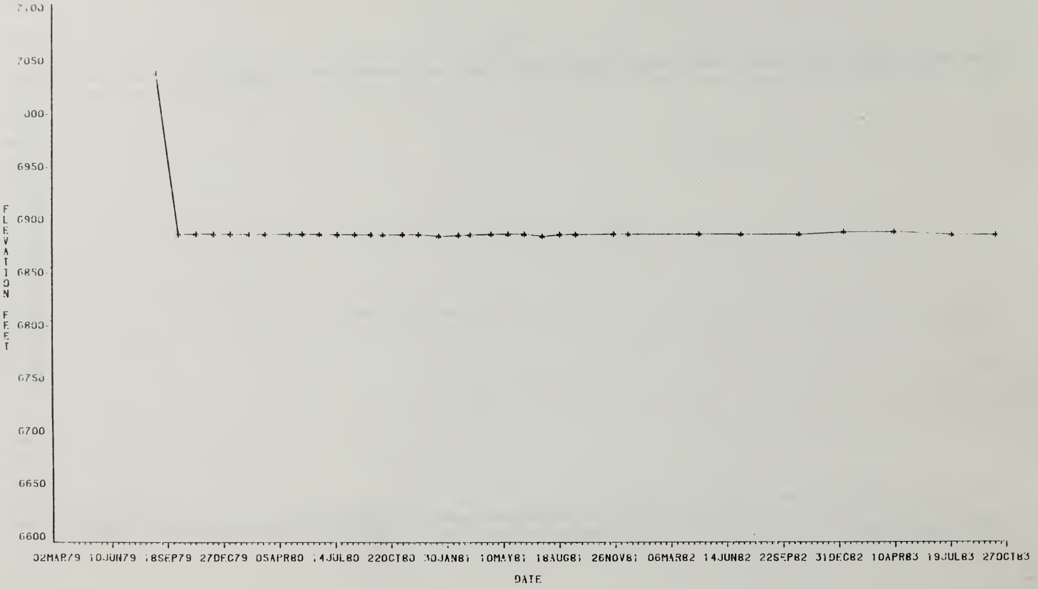

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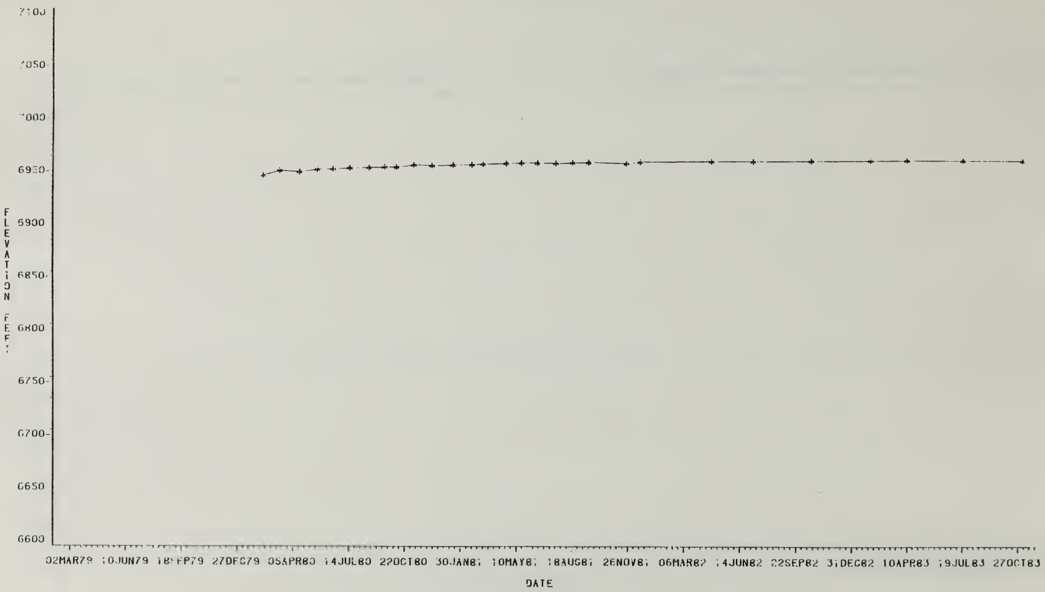
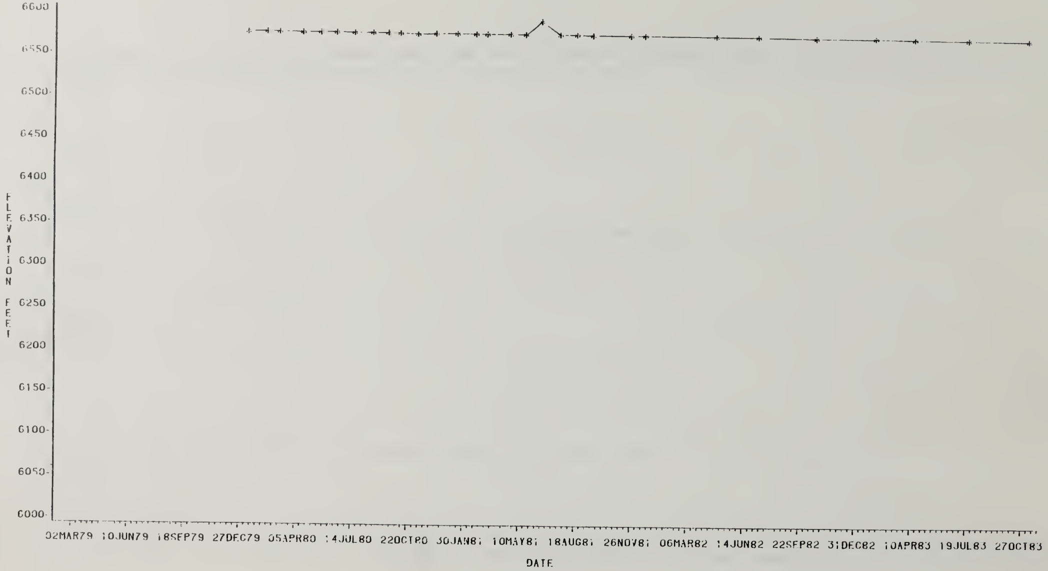


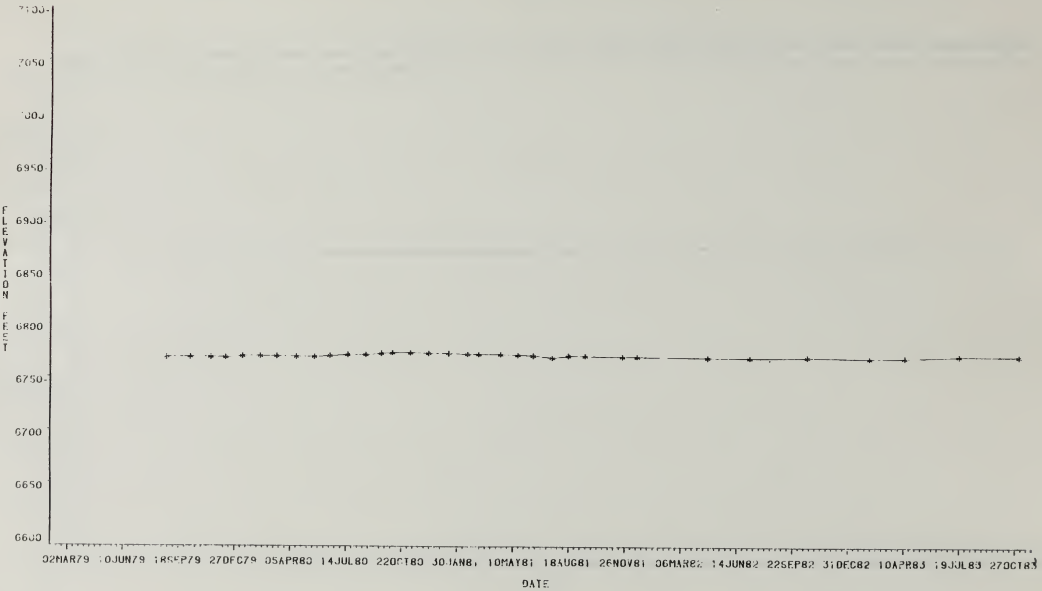
WATER LEVEL PLOTS IN LOWER AQUIFER WELLS

REQUIRED BY WATER AUGMENTATION PLAN
LOC- WY71



WATER LEVEL PLOTS OF LOWER AQUIFER WELLS

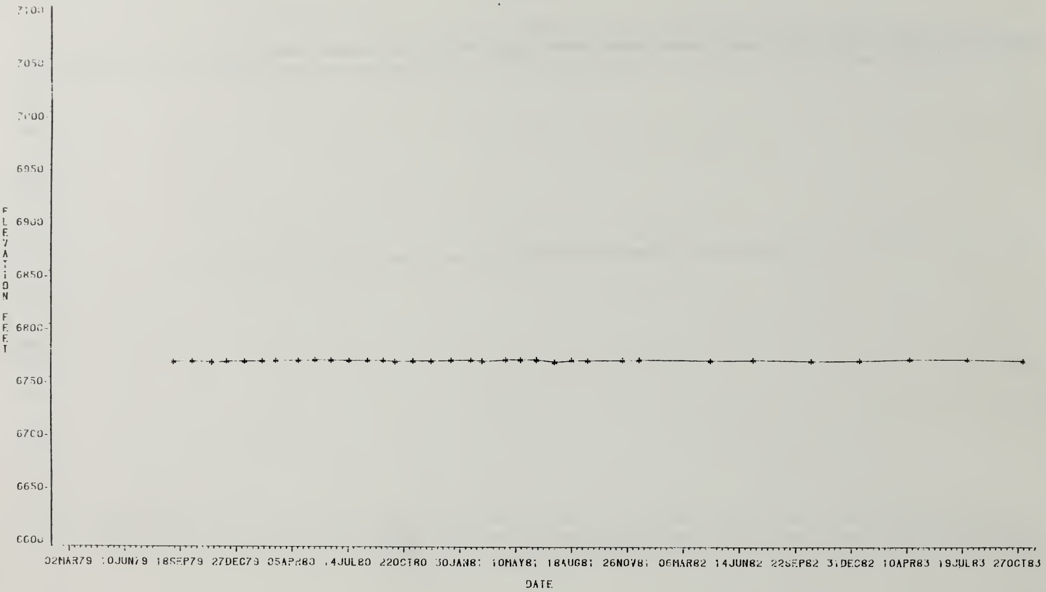
REQUIRED BY WATER AUGMENTATION PLAN
LOC=WY72



WATER LEVEL PLOTS OF LOWER AQUIFER WELLS

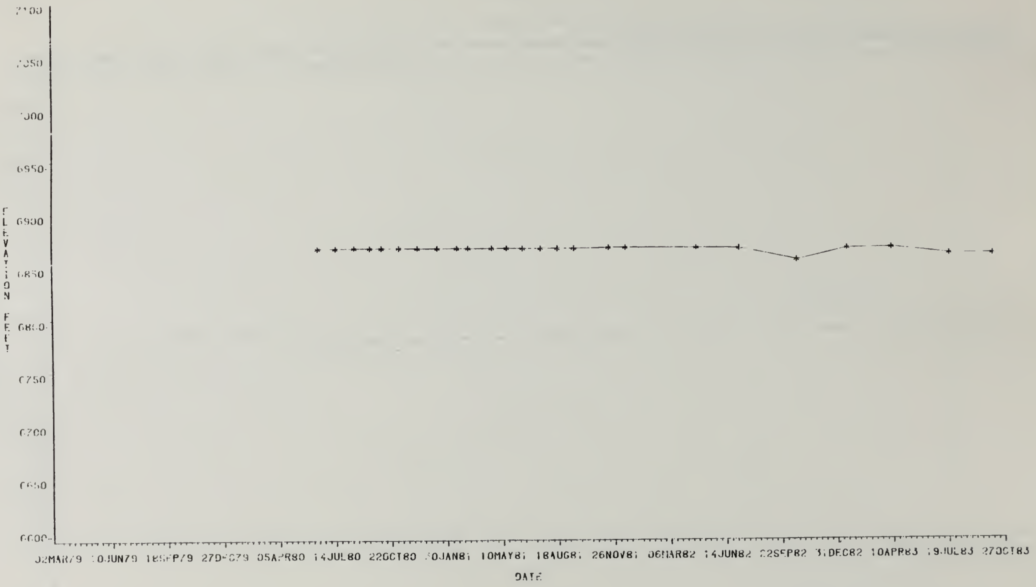
REQUIRED BY WATER AUGMENTATION PLAN

LUC-WY75



WATER LEVEL PLOTS OF LOWER AQUIFER WELLS

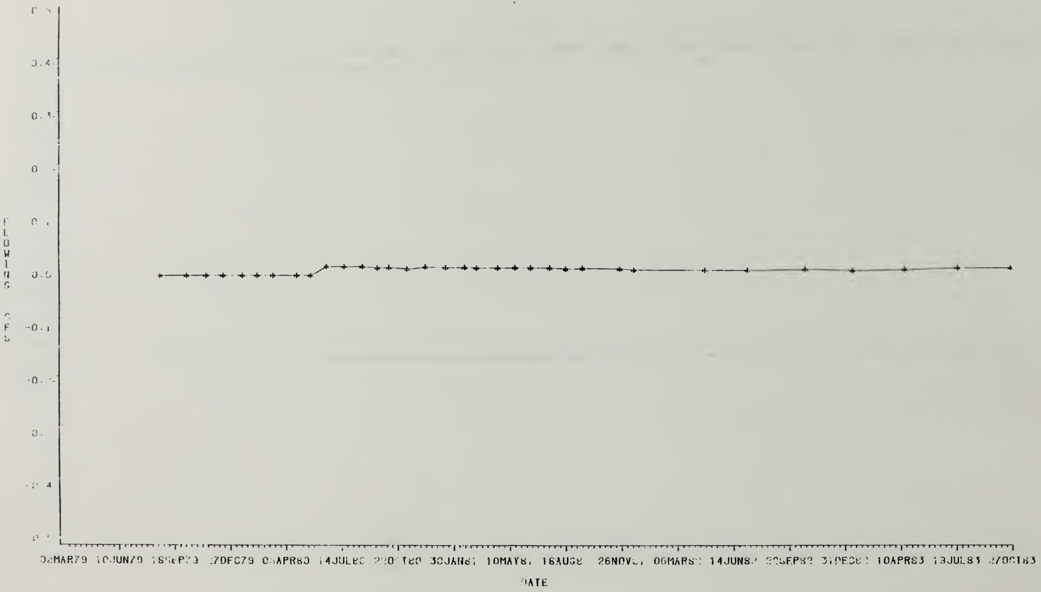
REQUIRED BY WATER AUGMENTATION PLAN
LOC=WY76



WATER LEVEL PLOTS OF LOWER AQUIFER WELLS

REQUIRED BY WATER AUGMENTATION PLAN

LOC=WY77



WATER LEVEL PLOTS OF LOWER AQUIFER WELLS

REQUIRED BY WATER AUGMENTATION PLAN
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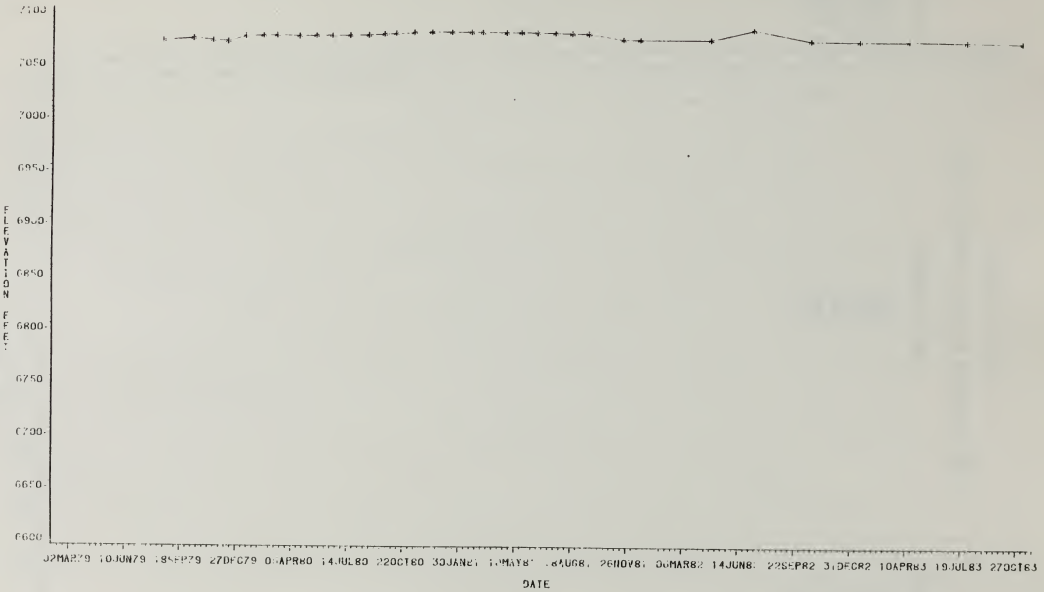


WATER LEVEL PLOTS OF LOWER AQUIFER WELLS

REQUIRED BY WATER AUGMENTATION PLAN

LOC=WY79

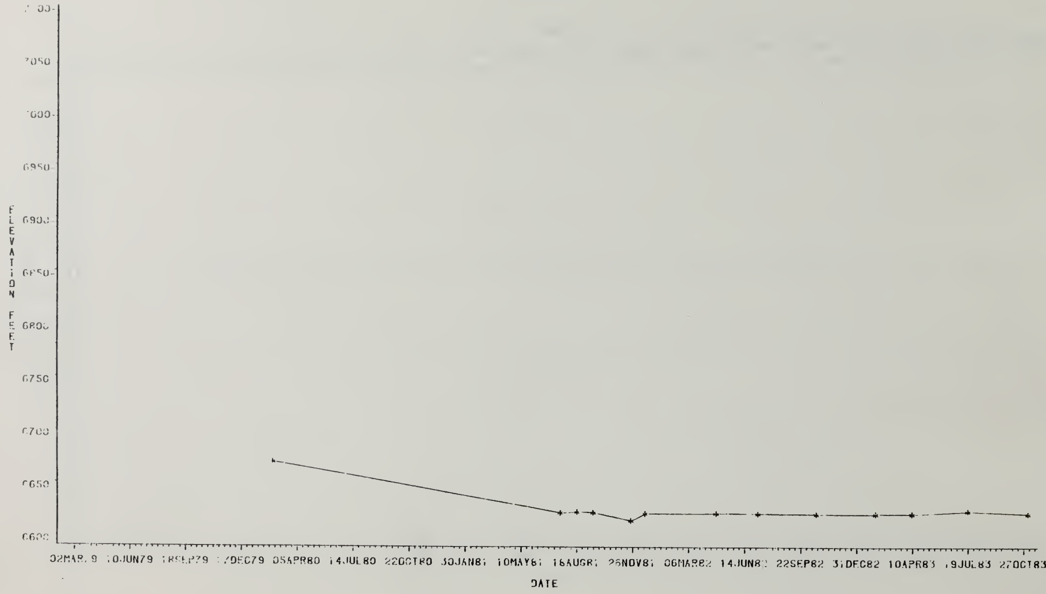


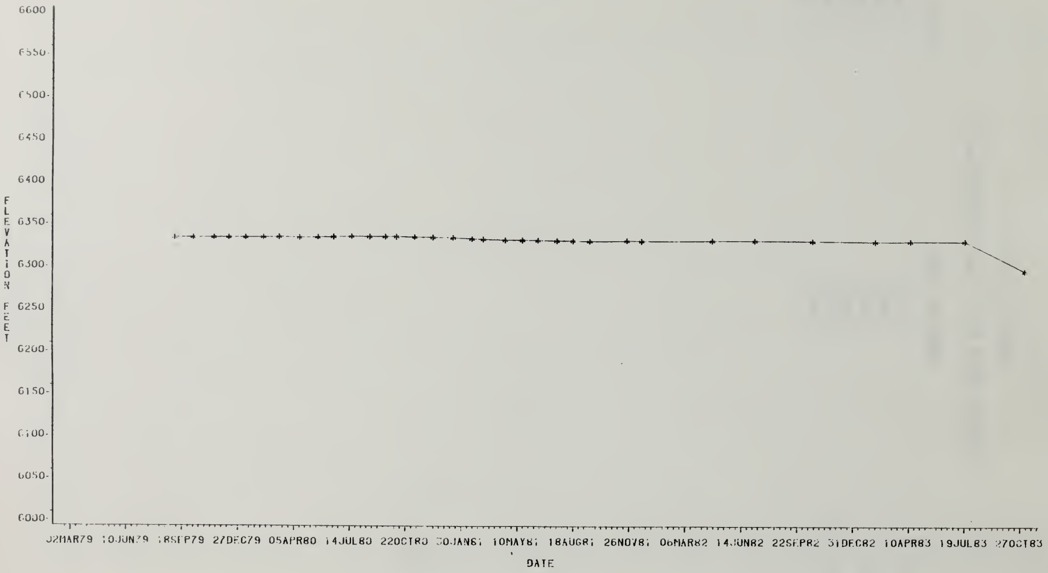
TABLE 1.2.1.4-17

PLOTS OF WATER LEVELS IN COMPOSITE WELLS

Well No.	Computer Code	Page No.
GREENO 404	WV01	I-180
OLDLAND 3	WV02	I-181
GP-17X-BG	WV03	I-182
BUTE 25	WV04	I-183
LIBERTY BELL 12	WV05	I-184
TG 71-1	WV10	I-185

WATER LEVEL PLOTS IN COMPOSITE WELLS

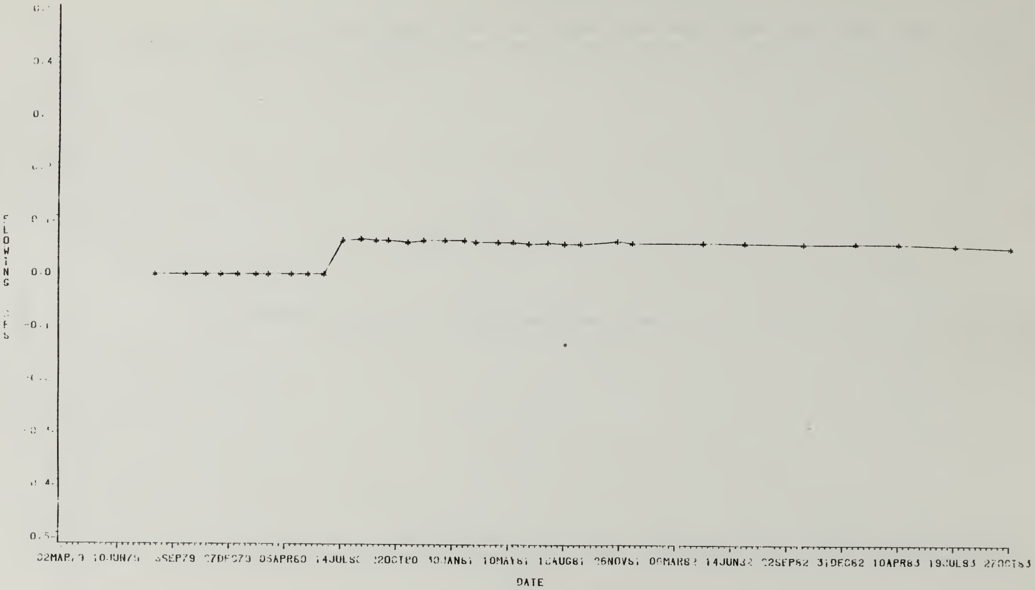
REQUIRED BY WATER AUGMENTATION PLAN
LOC=WV01



WATER LEVEL PLOTS OF COMPOSITE WELLS

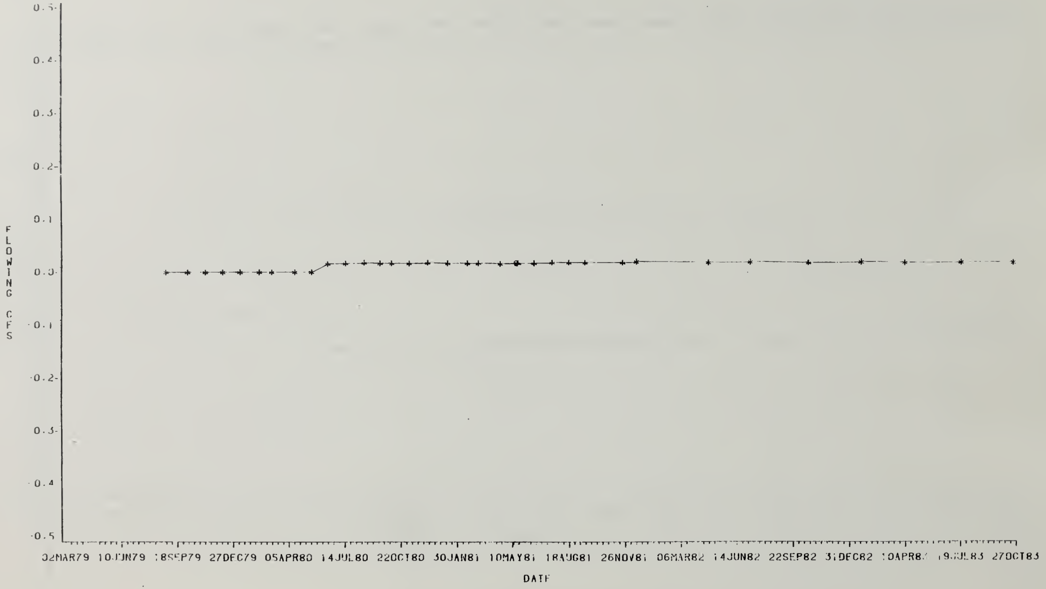
REQUIRED BY WATER AUGMENTATION PLAN

LOC=WV02



WATER LEVEL PLOTS IN COMPOSITE WELLS

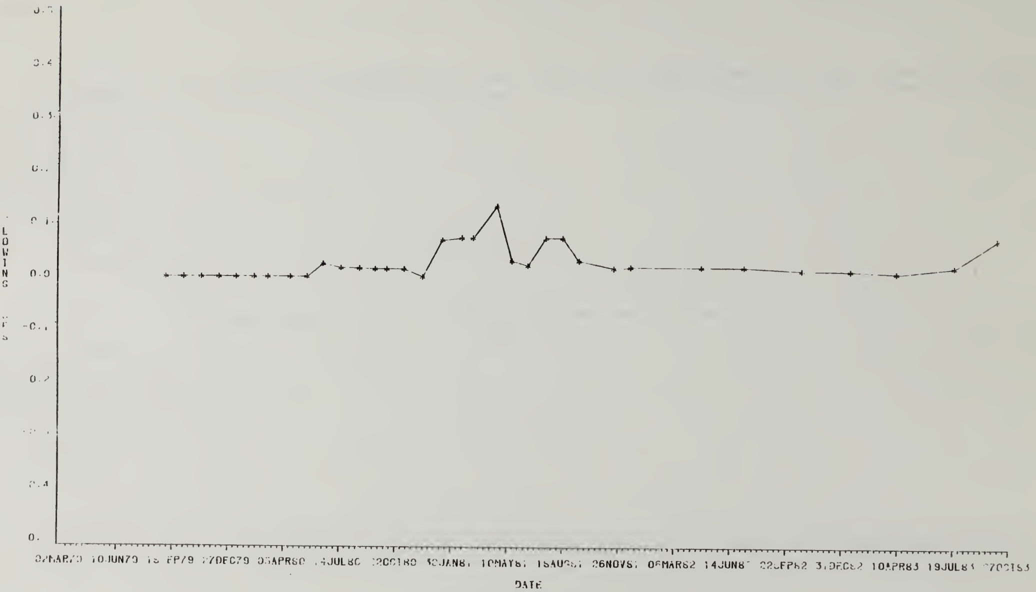
REQUIRED BY WATER AUGMENTATION PLAN
LOC=WV03



WATER LEVEL PLOTS OF COMPOSITE WELL

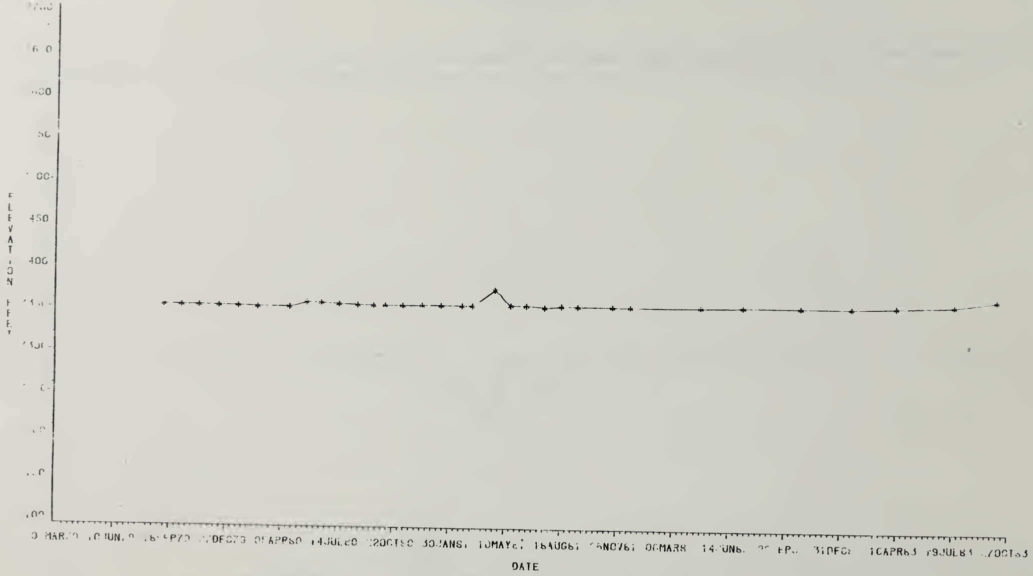
REQUIRED BY WATER AUGMENTATION PLAN

LOC=WY04



WATER LEVEL PLOTS OF COMPOSITE WELLS

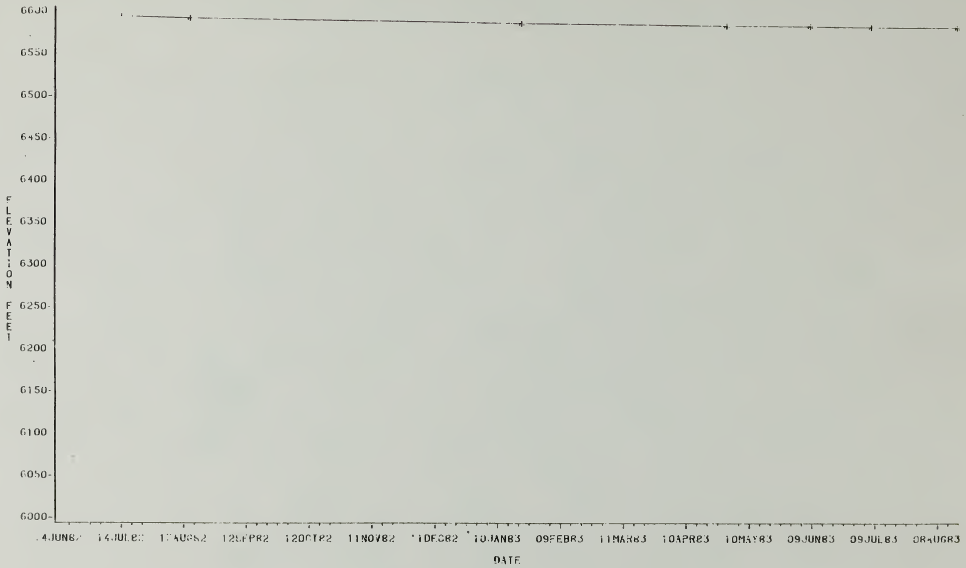
REQUIRED BY WATER AUGMENTATION PLAN
LOC=WV05



WATER LEVEL PLOTS IN COMPOSITE WELLS

REQUIRED BY WATER AUGMENTATION PLAN

LOC=WV10



IMPOUNDMENTS/
LAND APPLICATION/
REINJECTION/DISCHARGE

1.2.1.5 Impoundments/Land Application/Reinjection/ Discharge

Discharging of mine water into Piceance Creek begun in July 1979. Water samples for flow and quality analyses were taken at ponds A/B discharge point. Fluoride samples were taken in the field at A/B discharge point (WN40), above discharge point on Piceance Creek (WN41), below discharge point on Piceance Creek (WN42), and at Hunter Creek (USGS Station 061) (WU61) data are reported for June through November 1983. Refer to Table 1.2.1.5-1 for flow and field measurements. Plots of flow, field fluoride, and specific conductance are presented in Figures 1.2.1.5-1 through 1.2.1.5-3 for A/B discharge (WN40). Water analyses are reported in Section 1.2.2.5.

Monthly levels samples were taken at 22X-17 (WI19) and 24X-17 (WI17) during June through November 1983. Data are presented in Table 1.2.1.5-2. These wells are designated as injection wells but have never been utilized as such. Plots of these wells for levels follow the data table in Figures 1.2.1.5-4 and 1.2.1.5-5.

Weekly levels readings were taken at pond seepage wells 41X13 (WW13) and 31X12 (WW22) while monthly levels samples were taken at the shale pile seepage well 32Y12 (WW32) during June through November 1983; see Table 1.2.1.5-3. Plots of the pond seepage wells are reported in Bedrock Well Section 1.2.1.4. Refer to Table 1.2.1.4-14 in that section for the corresponding page number. These wells are monitoring water levels in the UPC_1 zone and are reviewed monthly to detect any changes.

Monthly field samples were taken at Ponds A/B and C seepage monitoring wells (WW13 and WW22) in June through November 1983 while quarterly field samples were collected in August and November 1983 at the leachate shale pile monitoring well (WW32). See data Table 1.2.1.5-4.

Location of water stations presented in this sub-section can be referenced on Figure 1.2-1 (jacket map).

TABLE 1.2.1.5-1

CR-TRACT
NPDES DISCHARGE
WEEKLY AND MONTHLY FIELD MEASUREMENTS

LOC	YR	MO	DY	FLOW (CFS)	PH UNIT	SPECIFIC CONDUCTIVITY (MG/L)	DISS OXYGEN (MG/L)	FIELD FLUORIDE (MG/L)	TEMPERATURE (DEG C)
WN40	83	6	2	1.0000	8.8	2130.0		23.1	17.0
			9	1.1000	8.8	2240.0		22.6	17.0
			16	.8000	8.8	2080.0		23.6	18.0
			23	.9000	8.7	2070.0		23.3	20.0
			28	.9000	8.7	1850.0		24.1	21.0
		7	6	.9000	8.8	1900.0		23.0	20.0
			14	1.0000	8.7	2150.0		23.9	21.0
			21	.9000	8.8	2100.0		23.1	21.0
			28	.9000	8.8	2110.0		21.9	19.0
		8	4	.5000	8.6	2080.0		22.5	22.0
			11	.9300	8.8	1980.0		20.3	22.5
			18	.9300	9.0	2030.0		22.3	22.0
			25	.9300	8.8	2170.0		20.6	23.0
		9	1	.8800	8.9	2080.0		20.8	21.0
			8	.8300	8.8	2160.0		21.0	20.0
			15	.8300	9.0	2140.0		20.8	17.0
			22	.9000	8.9	2070.0		21.0	14.0
			29	.8300	8.8	2110.0		21.1	15.0
		10	6	.8800	8.8	2090.0		22.1	16.0
			13	.8900	8.8	2180.0		20.0	15.0
			20	.8800	8.8	2200.0		20.8	12.0
			27	.9330	8.8	2220.0		21.0	12.0
		11	3	.8260	8.8	1970.0		21.1	12.0
			11	.9060	8.9	2110.0	7.2	20.9	11.0
			17	.9330	8.9	2110.0		20.7	12.0
			22	.8790	8.8	1980.0		20.8	7.0
WN41	83	6	2					.6	
			9					.6	
			16					.6	
			23					.6	
			28					.6	
		7	6					.9	
			14					.9	
			21					.9	
			28					.7	
		8	4					.7	
			11					.8	
			18					.8	
			25					.5	
		9	1					.6	

NOTE: -INDICATES LESS THAN

TABLE 1.2.1.5-1 (cont'd)

CB-TRACT
NPDES DISCHARGE
WEEKLY AND MONTHLY FIELD MEASUREMENTS

LOC	YR	MO	DY	FLOW (CFS)	PH UNIT	SPECIFIC CONDUCTIVITY (MG/L)	DISS OXYGEN (MG/L)	FIELD FLUORIDE (MG/L)	TEMPERATURE (DEG C)
WN41	83	9	8					.5	
			15					.7	
			22					.7	
			29					.7	
		10	6					.7	
			13					.8	
			20					.8	
			27					.8	
		11	3					.8	
			11					.8	
			17					.7	
			22					.8	
WN42	83	6	2					.6	
			9					.8	
			16					.7	
			23					.7	
			28					.9	
		7	6					1.2	
			28					1.0	
		8	4					.8	
			11					.9	
			18					1.0	
			25					.8	
		9	1					.9	
			8					.9	
			15					1.0	
			22					1.2	
			29					.7	
		10	6					.8	
			13					1.0	
			20					1.0	
			27					1.1	
		11	3					1.2	
			11					1.2	
			17					1.3	
			22					1.2	
WN61	83	6	2					.6	
			9					.8	
			16					.7	
			23					.8	

NOTE: -INDICATES LESS THAN

TABLE 1.2.1.5-1 (cont'd)

CB-TRACT
NPDES DISCHARGE
WEEKLY AND MONTHLY FIELD MEASUREMENTS

LOC	YR	MO	DY	FLOW (CFS)	PH UNIT	SPECIFIC CONDUCTIVITY (MG/L)	DISS OXYGEN (MG/L)	FIELD FLUORIDE (MG/L)	TEMPERATURE (DEG C)
WU61	83	6	28					.9	
		7	6					1.0	
			14					1.0	
			21					1.1	
			28					.9	
		8	4					.8	
			11					.9	
			18					1.0	
			25					.9	
		9	1					.9	
			8					.9	
			15					1.0	
			22					1.0	
			29					.8	
		10	6					.9	
			13					.9	
			20					.9	
			27					.8	
		11	3					.9	
			11					.9	
			17					1.0	
			22					1.0	

NOTE: -INDICATES LESS THAN

C-B TRACT A/B DISCHARGE MONTHLY MEAN FLOW

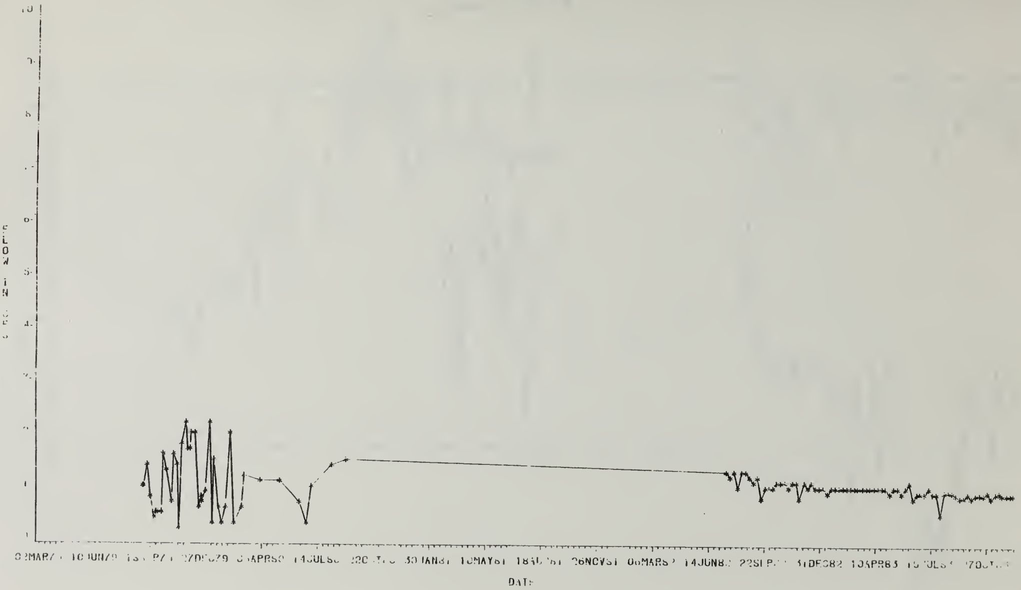


Figure 1.2.1.5-1

C-B TRANCT A/B DISCHARGE FIELD FLUORIDE CONCENTRATIONS (MG/L)

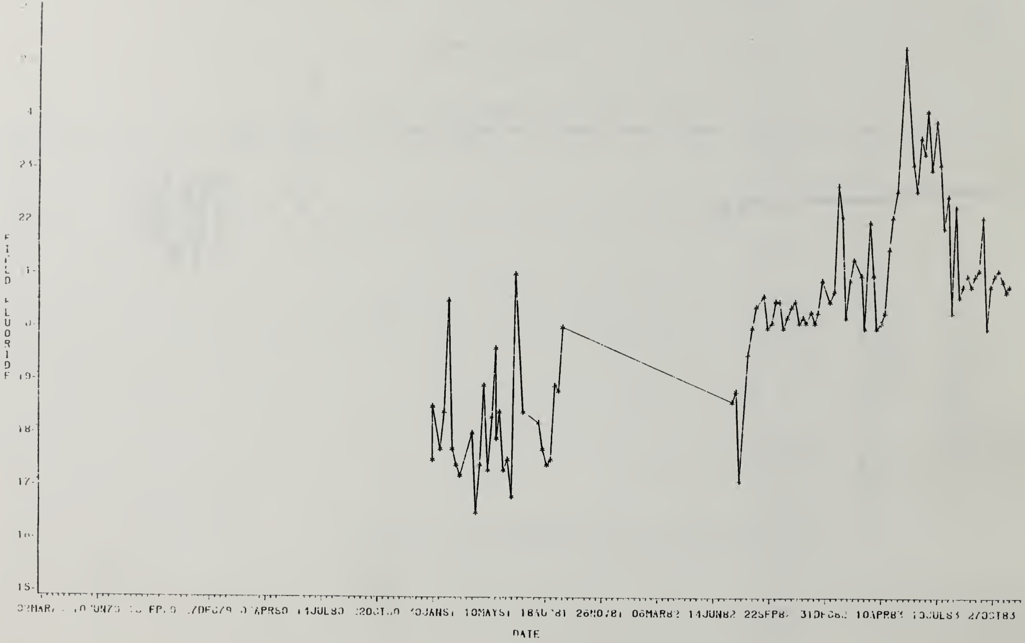


Figure 1.2.1.5-2

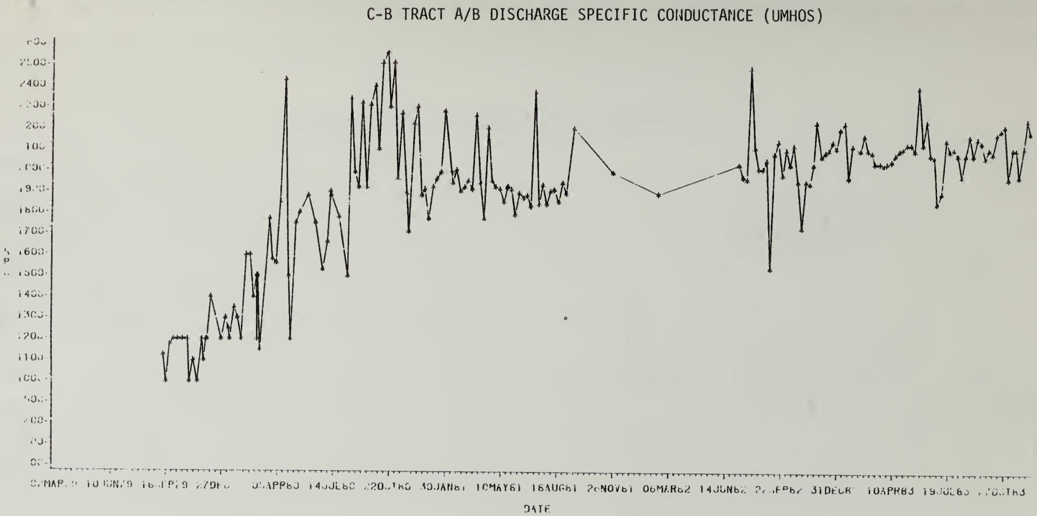


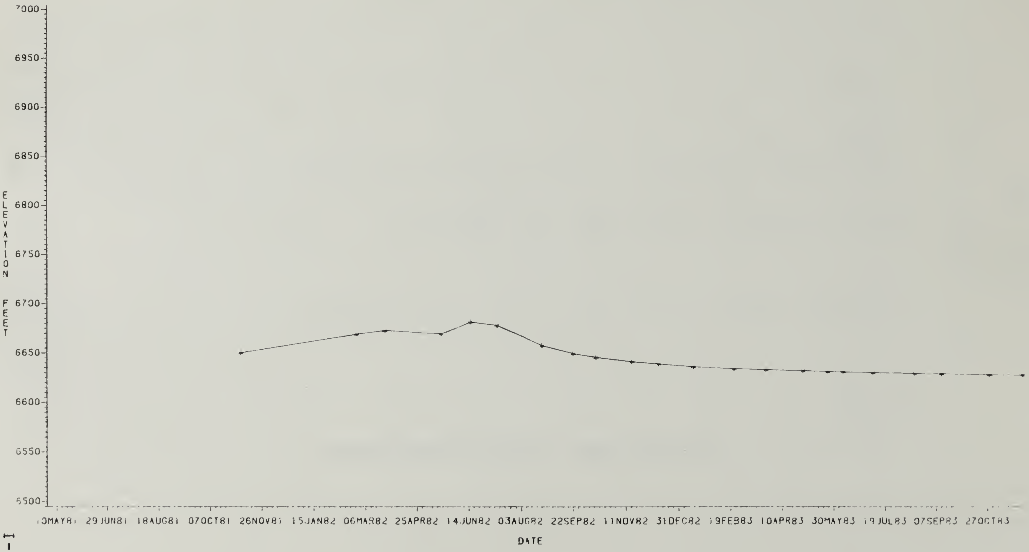
FIGURE 1.2.1.5-3

TABLE 1.2.1.5-2

```
                    CB-TRACT
      WATER LEVELS FOR INJECTION WELLS
           FOR SAMPLE DATE SHOWN


                    WELL ID - FT FROM GROUND LEVEL
                          WI17             WI19
                          DEPTH            DEPTH
 YR    MO    DY           (FT)             (FT)
---------------------------------------------------
 83     5     8         6630.70          6545.80
        7     7         6630.00          6544.60
        8    17         6629.40          6543.10
        9    12         6629.00          6542.30
       10    23         6628.00          6540.90
       11    29         6627.70          6538.60


       PLUGGD = WELL PLUGGED
       DRY    = WELL DRY
       FLWING = WELL FLOWING
       INACCS = WELL INACCESSABLE
```



WATER LEVELS PLOT OF INJECTION WELL

LOC=W117

FIGURE 1.2.1.5-4

WATER LEVELS PLOT OF INJECTION WELL

LCC-WI19

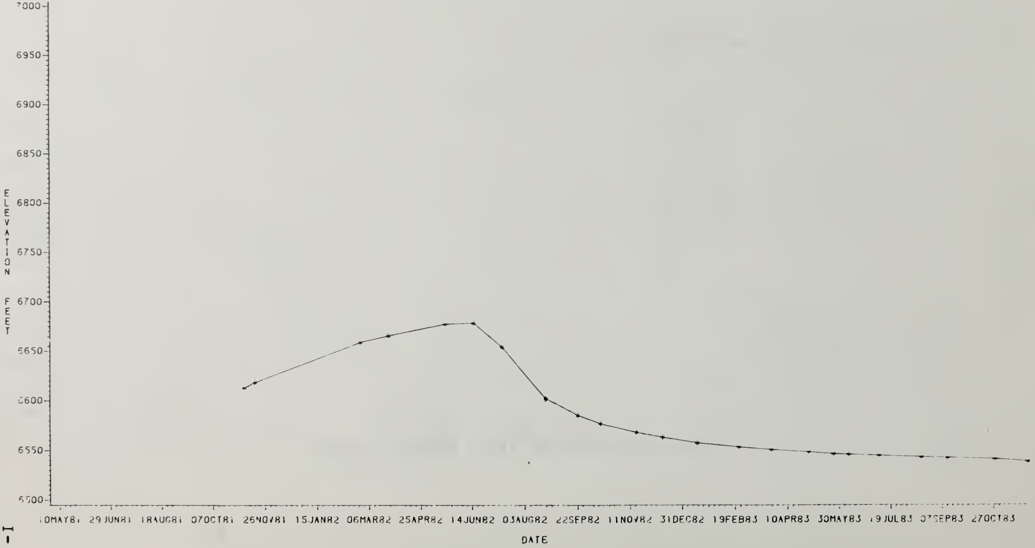


FIGURE 1. 1.5-5

TABLE 1.2.1.5-3

C-a TRACT
SEEPAGE MONITORING WELLS

YR	MO	DY	WW13 ELEV (FT)	WW22 ELEV (FT)	WW32 ELEV (FT)
83	6	7	6627	6590	6724
		13	6626	6590	
		20		6590	
		21	6625		
		27	6623	6591	
	7	5	6624	6590	
		11	6623	6591	
		19	6623	6591	
		25			6725
		26		6591	
		27	6622		
	8	2	6621	6591	
		3			6725
		9	6621	6591	
		16	6620	6591	6725
	9	6	6619	6591	
		12			6723
		14	6618		
		20	6617	6591	
		22		6591	
		27	6615		
		28	6617		
	10	4	6615	6591	
		11	6616	6591	
		19	6615	6591	
		21			6722
		24	6615	6591	
		31		6590	
	11	8		6591	
		15		6590	
		22		6591	
		29	6612	6591	6721

TABLE 1.2.1.5-4

CB-TRACT
FIELD MEASUREMENTS
SEEPAGE MONITORING WELLS

WELL	YR	MO	DY	PH (UNITS)	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (UMHOS)	FIELD FLUORIDE (MG/L)
WW13	83	6	7				
			13				
			21				
			27	7.9	12.0	1430.0	1.1
		7	5				
			11	7.8	12.0	1290.0	.9
			19				
			27				
		8	2				
			9				
			16	7.8	14.0	1220.0	.8
		9	6				
			14				
			20				
			27	7.8	11.0	1240.0	.7
				7.8	11.0	1260.0	.7
			28	8.0	11.0	1090.0	.7
		10	4				
			11				
			19				
			24				
		11	29	8.3	9.5	1350.0	.9
WW22	83	6	7				
			13				
			20				
			27	7.1	12.0	2870.0	.6
		7	5				
			11	7.2	10.5	2740.0	.5
			19				
			26				
		8	2				
			9				
			16	6.8	11.0	2860.0	.4
		9	6				
			20				
			22	7.2	11.0	2880.0	.5
		10	4				
			11				
			19				
			24				
			31	7.3	12.0	2850.0	.5
		11	8				
			15				

CB-TRACT
FIELD MEASUREMENTS
SEEPAGE MONITORING WELLS

WELL	YR	MO	DY	PH (UNITS)	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (UMHOS)	FIELD FLUORIDE (MG/L)
WW22	83	11	22				
			29	7.5	9.5	2680.0	.3
WW32	83	6	7				
		7	25				
		8	3				
			16	7.5	10.0	1390.0	.2
		9	12				
		10	21				
		11	29	7.5	9.0	1180.0	.2

SHAFT AND
MINE WATER

1.2.1.6 Shaft and Mine Water

Water levels readings are continuing to be taken weekly since flooding the V/E shaft (WZ01) in September 1981. Data for June through November 1983 are included in this section along with a Plot of water elevation in the shaft since recovery. See Table 1.2.1.6-1 and Figure 1.2.1.6-1.

A water usage report is submitted to the State Engineer's Office monthly. This report consists of all water used and pumped on the C-b Tract. Table 1.2.1.6-2 reports these waters in gallons coming from the various wells, ponds and shafts.

TABLE 1.2.1.6-1

```
          CB-TRACT
    SHAFT WATER LEVELS


               SHAFT
                    W/01
               DEPTH
YR MO DY  (FT)
--------------------
83  6  6 6291.2959
       7 6292.0977
      13 6291.1992
      14 6291.3984
      20 6291.0000
      21 6291.7959
      27 6292.0000
      28 6291.5992
    7  5 6291.5000
      12 6291.5977
      19 6291.5977
      26 6291.6992
    8  2 6291.5000
       9 6291.5000
      16 6291.3984
      23 6291.3984
      30 6291.2959
   10  4 6289.7959
      11 6289.8984
      19 6290.5000
      25 6290.5000
   11  1 6291.1992
      15 6293.6992
      21 6294.6992
      29 6294.3984
```

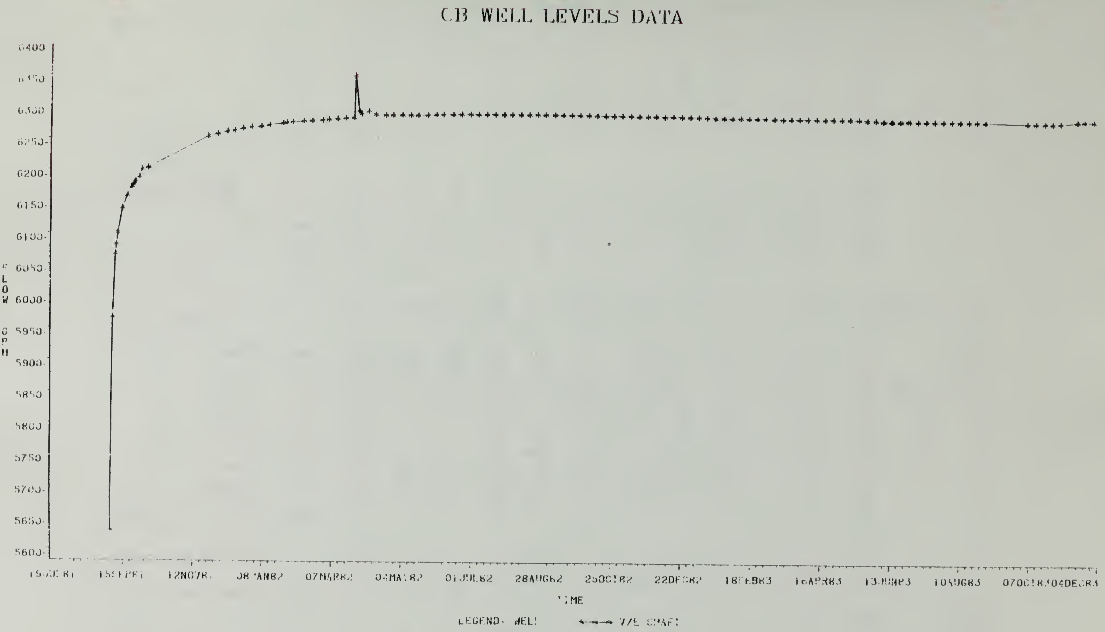


FIGURE 1.2.1.6-1

TABLE 1.2.1.6-2

1983 C-B WATER USAGE (10**6 GALLONS, * =ACRE FEET)

	USE	SOURCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL YTD	TOTAL YRS TD
ALL SHAFTS	GLAND WTR	PUMP STA	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*		190.6 584.9*
*TOTAL ALL SHAFTS			.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*		190.6 584.9*
OFF-TRACT WTR USED	POTABLE	TOWN	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*		1.1 3.3*
*TOTAL OFF-TRACT WTR USED			.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*		1.1 3.3*
TRACT WATER USED	BATCH PLNT	24X-25	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*		2.5 7.6*
	CONSTR	PONDS	.01 0.03*	.02 0.05*	.02 0.05*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.01 0.02*	.01 0.02*	.00 0.00*	.06 .18*	18.0 55.3*
	CONSTR	24X25	.00 0.00*	.00 0.00*	.00 0.00*	.02 0.07*	.02 0.07*	.02 0.07*	.01 0.02*	.02 0.05*	.02 0.05*	.00 0.00*	.00 0.00*	.00 0.00*	.11 .34*	1.8 5.4*
	DUST CNTL	PONDS	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.03 0.09*	.00 0.00*	.01 0.04*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.04 .12*	6.7 20.5*
	EVP & LEAK	POND C	.00 0.00*	.00 0.00*	.00 0.00*	.02 0.08*	.07 0.23*	.09 0.28*	.01 0.03*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.20 .61*	144.8 444.5*
	NPDES REL	PONDS	20.83 63.91*	18.17 55.74*	20.45 62.74*	19.44 59.64*	19.95 61.21*	18.52 56.83*	17.70 54.30*	17.16 52.67*	16.43 50.42*	16.99 52.13*	17.14 52.59*	.00 0.00*	202.77 622.19*	991.4 3,042.1*
	REINJECT	PONDS	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*		225.7 692.6*
	SPR IRRIG	POND C	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*		79.1 242.6*
*TOTAL TRACT WATER USED			20.84 63.94*	18.18 55.79*	20.46 62.79*	19.49 59.79*	20.07 61.60*	18.63 57.18*	17.73 54.39*	17.18 52.72*	16.45 50.47*	17.00 52.15*	17.15 52.62*	.00 0.00*	203.18 623.44*	1,470.0 4,510.6*
WATER IN STORAGE	-	POND A	1.00 3.07*	1.00 3.07*	1.00 3.07*	1.00 3.07*	1.00 3.07*	1.00 3.07*	1.00 3.07*	1.00 3.07*	1.00 3.07*	1.00 3.07*	1.00 3.07*	.00 0.00*		
	-	POND B	.15 0.46*	.15 0.46*	.15 0.46*	.15 0.46*	.15 0.46*	.15 0.46*	.15 0.46*	.15 0.46*	.15 0.46*	.15 0.46*	.15 0.46*	.00 0.00*		
	-	POND C	.20 0.61*	.20 0.61*	.20 0.61*	.17 0.54*	.10 0.31*	.01 0.03*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*		
*TOTAL WATER IN STORAGE			1.35 4.14*	1.35 4.14*	1.35 4.14*	1.32 4.07*	1.25 3.84*	1.16 3.56*	1.15 3.53*	1.15 3.53*	1.15 3.53*	1.15 3.53*	1.15 3.53*	.00 0.00*		
WATER PUMPED	-	33X-1	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*		4.3 13.3*
	-	24X-25	.00 0.00*	.00 0.00*	.00 0.00*	.02 0.07*	.02 0.07*	.02 0.07*	.02 0.06*	.02 0.05*	.02 0.05*	.00 0.00*	.00 0.00*	.00 0.00*	.12 .38*	8.1 24.7*
	-	32X-12	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*		5.9 18.0*
	-	V/E SHAFT	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*	.00 0.00*		678.9 2,083.1*
	-	PROD & SERV	21.19 65.04*	18.62 57.14*	20.83 63.91*	19.92 61.13*	19.98 61.31*	19.10 58.60*	19.75 60.60*	18.87 57.91*	18.19 55.80*	18.89 57.96*	17.96 55.11*	.00 0.00*	213.30 654.51*	1,026.3 3,149.3*
*TOTAL WATER PUMPED			21.19 65.04*	18.62 57.14*	20.83 63.91*	19.84 61.20*	20.00 61.38*	19.12 58.67*	19.77 60.66*	18.89 57.96*	18.20 55.85*	18.89 57.96*	17.96 55.11*	.00 0.00*	213.43 654.89*	1,723.5 5,288.4*

ITION PAPER NOW

SHALE DUMPS

1.2.1.7 Shale Dumps

Leachate data were collected from the lysimeters for May through August 1983. The leachates are initiated from precipitation percolating (leaching) through the raw shale to the collectors. Collector bottles are designated A thru E. Test set up was described in 1981 C.B. Annual Report.

Field measurement (pH, DO, conductivity and temperature) data are also collected at the lysimeters at three depths. Chemical analyses are analyzed and reported by Colorado State University.

LYSIMEYER CHECK
C. B. TRACT

Date: 5-31-83 Time: a.m. Observer: Ralphs	10 Foot					15 Foot					20 Foot					COMMENTS
	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	
Volume (l)	0.2				*1.6	2.0	2.0		2.1		2.0	2.0		20.0		* 10e bottle leaking around spout - bottle replaced
Temp (°C)	7				7	6	6		7		6	6		8		
pH	8.38				8.40	7.99	8.03		8.28		8.10	8.05		8.09		
Conductivity	5970				5890	6200	6230		6200		6700	6730		6840		
Date: 6-3-83 Time: a.m. Observer: Ralphs																
Volume (l)	-	-	-	-	4.8	2.0	0.1	-	-	-	2.0	2.0	-	10.3	-	
Temp																
pH																
Conductivity																
Date: 6-8-83 Time: a.m. Observer: Newbould																
Volume (l)	0.4	-	-	-	5.5	2.0	0.5	-	-	-	2.0	2.0	-	14.7	-	
Temp																
pH																
Conductivity																

LYSIMEYER CHECK
C. B. TRACT

Date: 6-9-83 Time: 1600 Observer: Ralphs	10 Foot					15 Foot					20 Foot					COMMENTS
	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	
Volume (1)	T	-	-	-	1.3	2.0	0.2	-	-	-	2.0	2.0	-	0.4	-	
Temp																
pH																
Conductivity																
Date: 6-14-83 Time: a.m. Observer: Ralphs																
Volume (1)	.14	-	-	-	4.9	2.0	1.2	-	-	-	2.0	2.0	-	9.2	-	
Temp (°C)	13°				9°	8°	8°				9°	9°		8°		
pH	8.16				8.24	7.90	7.96				8.01	7.86		7.90		
Conductivity	6600				6600	7100	6800				8300	8200		8000		
Date: 6-27-83 Time: p.m. Observer: Cloninger																
Volume (1)	.23	-	-	-	21.0	2.0	2.0	-	17.0	-	2.0	2.0	-	20		
Temp (°C)	20°				18°	18°	18°		17°		18°	18°		26°		
pH	8.28				7.75	7.80	7.99		7.80		7.87	7.75		7.84		
Conductivity	6800				5900	7900	6700		7900		8200	8400		2500		

LYSIMEYER CHECK
C. B. TRACT

Date: 6-28-83 Time: a.m. Observer: Cloninger/ Rushing	10 Foot					15 Foot					20 Foot					COMMENTS
	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	
Volume (1)						2	2									
Temp																
pH																
Conductivity																
Date: 6-30-83 Time: a.m. Observer: Rushing/ Cloninger																
Volume (1)	.05				21	2	2			6	2	2		3.5		
Temp (°C)	18°				14°	13°	12°			13°	13°	14°		13°		
pH	8.09				8.02	7.69	7.69			7.92	7.67	7.71		7.81		
Conductivity	5.9				6.3	7.0	6.3			6.2	5.6	5.1		5.8		
Date: 7-5-83 Time: a.m. Observer: Baker/ Cloninger																
Volume (1)	.18				21	2	2			8.5	2	2		16.5		
Temp (°C)	25°				21°	23°	24°			22°	22°	23°		20°		
pH	8.24				8.21	7.94	7.83			7.98	7.80	7.79		8.03		
Conductivity	6.7				6.8	6.7	7.2			7.1	7.6	4.0		7.4		

LYSIMEYER CHECK
C. B. TRACT

Date: 7-8-83 Time: 1100 Observer: Ralphs	10 Foot					15 Foot					20 Foot					COMMENTS
	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	
Volume (l)	0.3	-	-	-	5.6	2.0	-	-	-	-	2.0	2.0	-	10.2	-	
Temp (°C)	20	-	-	-	18	19	-	-	-	-	19	19	-	18	-	
pH	8.22	-	-	-	8.32	7.85	-	-	-	-	7.90	7.86	-	7.98	-	
Conductivity	5790	-	-	-	6080	6120	-	-	-	-	6800	6890	-	6880	-	
Date: 7-25-83 Time: 7:29 Observer: Rushing/ Cloninger																
Volume (l)	2	-	-	-	14.5	2	-	-	-	-	2	2	-	20	-	
Temp (°C)	15°	-	-	-	15°	14°	-	-	-	-	14°	14°	-	15°	-	
pH	8.16	-	-	-	7.77	7.79	-	-	-	-	7.79	7.86	-	7.69	-	
Conductivity	5810	-	-	-	6530	5370	-	-	-	-	5890	6480	-	6130	-	
Date: 7-26-83 Time: 7:22 Observer: Rushing/ Cloninger																
Volume (l)	-	-	-	-	1.5	1.7	-	-	-	-	2	0.25	-	-	-	
Temp																
pH																
Conductivity																

LYSIMEYER CHECK
C. B. TRACT

Date: 7-27-83 Time: 0740 Observer: Rushing/ Cloninger	10 Foot					15 Foot					20 Foot					COMMENTS
	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	
Volume (l)	-	-	-	-	-	2	-	-	-	-	2	-	-	-	-	
Temp																
pH																
Conductivity																
Date: 7-29-83 Time: 0730 Observer: Cloninger																
Volume (l)	0.18	-	-	0.6	4.2	2	0.7	-	-	-	2	2	-	0.8	-	
Temp (°C)	16°			13°	14°	13°	13°				15°	13°		14°		
pH	8.50			8.18	8.32	7.81	7.96				7.83	7.84		8.06		
Conductivity	5880			6400	4930	5100	5440				6600	6600		6880		
Date: 8-1-83 Time: 1055 Observer: Cloninger																
Volume (l)	-	-	-	-	4.5	2	-	-	-	-	2	2	-	2.6	-	
Temp (°C)					18°	19°					18°	19°		19°		
pH					8.26	7.77					7.86	7.83		8.11		
Conductivity					5190	4910					6460	6620		6310		

LYSIMEYER CHECK
C. B. TRACT

Date: 8-4-83 Time: 1546 Observer: Cloninger	10 Foot					15 Foot					20 Foot					COMMENTS
	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	
Volume (l)	.3	-	-	-	4	2	1	-	-	-	2	2	-	2.15	-	
Temp																
pH																
Conductivity																
Date: 8-15-83 Time: 0800 Observer: Cloninger/ Rushing																
Volume (l)	0.5	-	-	-	9	2	.13	-	-	-	2	2	-	14.7	-	
Temp (°C)	15°				15°	15°	15°				15°	15°		17°		
pH	8.35				8.37	7.82	8.08				8.12	8.07		8.08		
Conductivity	4940				5370	5080	5020				5340	5990		5900		
Date: 8-29-83 Time: 1613 Observer: Rushing																
Volume	.5	-	-	-	7.5	2	.7	-	-	-	2	2	-	2	-	
Temp																
pH																
Conductivity																

LYSIMEYER CHECK
C. B. TRACT

Date: 10-3-83 Time: 1600 Observer: Rushing	10 Foot					15 Foot					20 Foot					COMMENTS
	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	
Volume (1)	0.9	-	-	-	1.3	2.0	2.0	-	0.75	-	2.0	2.0	-	0.6	-	
Temp																
pH																
Conductivity																

1.2.1.8 Supplemental Water Data - Hydrology

Daily flow readings from Willow and Hunter Creeks for water year 1983 (October 1982 - September 1983) are reported in Tables 1.2.1.8-1 and 1.2.1.8-4 respectively.

Water levels data from five Mobil Oil Company monitoring wells are included in this section for June through September 1983. Tabulated data can be referenced in Table 1.2.1.8-5. Time series plots follow this data table for Wells MW01 (Well No. 1), MW02 (Well No. 2), MW03 (Well No. 3), MW12 (Well No. 12), and MW13 (Well No. 13), consecutively.

Data reported in this supplemental section are required by WAP.

TABLE 1.2.1.8-1 JEX-PILAND ENGINEE & GEOLOGISTS

Hunter Creek - Shell Station

Discharge In Cubic Feet Per Second

Water Year October 1982 to September 1983

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.8	1.1	1.1	0.8	0.9	1.8	1.2	0.8	1.0	6.4	6.4	6.0
2	0.8	1.0	1.1	0.8	0.8	1.5	1.1	0.8	2.0	6.6	6.4	5.8
3	0.8	1.0	1.1	0.8	0.8	1.2	1.1	0.8	2.5	6.6	6.3	5.8
4	0.7	1.0	1.0	0.8	0.8	1.2	1.1	0.8	2.1	6.6	6.3	5.8
5	0.8	1.0	1.0	0.8	0.8	1.2	1.5	0.7	2.0	6.6	6.4	5.7
6	0.8	1.0	1.0	0.8	1.0	1.2	1.4	0.7	2.2	6.6	6.4	5.5
7	0.8	1.0	1.0	0.8	0.9	1.1	1.4	0.7	2.3	6.6	6.4	5.4
8	0.8	1.1	1.0	0.7	0.8	1.2	1.5	0.7	2.5	6.6	6.4	5.4
9	0.8	1.1	1.0	0.6	1.0	1.3	1.6	0.7	3.7	6.6	6.4	5.1
10	0.06	1.1	1.0	0.6	1.0	1.4	1.6	0.7	4.9	6.7	6.4	4.8
11	0.07	1.1	1.1	0.5	1.0	1.3	1.6	0.7	5.4	6.7	6.4	4.7
12	0.06	1.1	1.1	0.6	1.0	1.3	1.6	0.7	5.5	6.7	6.6	4.5
13	0.04	1.1	1.1	0.6	1.0	1.3	1.6	0.7	5.7	6.9	6.4	4.5
14	0.04	1.0	1.0	0.6	1.0	1.2	1.6	0.7	5.8	6.9	6.3	4.3
15	0.04	1.0	1.0	0.6	1.0	1.2	1.6	0.7	6.0	6.9	6.3	4.3
16	0.04	1.0	1.1	0.6	1.1	1.2	1.6	0.7	6.0	6.9	6.3	4.3
17	0.04	1.1	1.1	0.6	1.0	1.2	1.6	0.7	6.1	6.9	6.3	4.2
18	0.4	1.1	1.0	0.6	1.1	1.2	1.6	0.7	6.1	6.9	6.3	4.1
19	1.9	1.1	0.8	0.6	1.1	1.2	1.6	0.7	6.1	7.0	6.3	4.1
20	1.0	1.1	0.8	0.6	1.0	1.2	1.6	0.7	6.3	7.0	6.3	4.1
21	1.0	1.0	0.8	0.6	1.0	1.2	1.6	0.7	6.4	7.0	6.3	4.1
22	1.0	1.0	0.8	0.7	1.0	1.2	1.6	0.7	6.4	10	6.3	4.1
23	0.9	1.0	0.8	0.6	1.0	1.2	1.6	0.7	6.6	8.0	6.1	4.1
24	1.1	1.0	0.9	0.4	1.1	1.2	1.6	0.7	8.5	7.0	6.1	4.1
25	0.9	1.1	0.9	0.3	1.3	1.2	1.6	0.7	11	6.9	6.1	4.1
26	1.0	1.0	0.8	0.3	1.2	1.3	1.1	0.7	11	7.2	6.1	3.9
27	1.1	1.0	0.8	0.7	1.1	1.3	0.8	0.6	7.7	7.0	6.1	3.8
28	1.1	1.0	0.8	1.2	1.1	1.3	0.8	0.6	6.4	6.9	6.1	3.8
29	1.0	1.0	0.8	1.0		1,3	0.8	0.6	6.4	6.7	6.1	3.8
30	1.1	1.1	0.8	1.0		1.2	0.8	0.6	6.4	6.7	6.1	3.9
31	1.0		0.8	0.9		1.2		0.6		6.6	6.1	
Total	22.0	31.3	29.4	21.1	27.9	39.0	41.8	21.6	161.0	214.7	194.8	138.1
Ac-ft	43.6	62.1	58.3	41.9	55.3	77.4	82.9	42.8	319.3	425.9	386.4	273.9

COLORADO PRINTING CO. GRAND JUNCTION COLO

1983 TOTAL SFD. 942.7
1983 TOTAL AC.FT. 69.8

TABLE 1.2.1.8-2

Stream Hunter Creek - Shell Station

Year 1983

Discharge in Cubic Feet Per Second

	JULY			AUGUST			SEPTEMBER		
Day	Daily Average	Daily Max.	Daily Min.	Daily Average	Daily Max.	Daily Min.	Daily Average	Daily Max.	Daily Min.
1	6.4	6.4	6.4	6.4	6.4	6.4	6.0	6.0	5.8
2	6.6	6.6	6.4	6.4	6.4	6.3	5.8	5.8	5.8
3	6.6	6.6	6.6	6.3	6.3	6.3	5.8	5.8	5.8
4	6.6	6.6	6.6	6.3	6.3	6.3	5.8	5.8	5.8
5	6.6	6.6	6.6	6.4	6.4	6.3	5.7	5.8	5.5
6	6.6	6.6	6.6	6.4	6.4	6.4	5.5	5.5	5.4
7	6.6	6.6	6.6	6.4	6.4	6.4	5.4	5.4	5.4
8	6.6	6.6	6.4	6.4	6.4	6.4	5.4	5.4	5.3
9	6.6	6.7	6.7	6.4	6.4	6.4	5.1	5.3	4.9
10	6.7	6.7	6.7	6.4	6.4	6.4	4.8	4.9	4.8
11	6.7	6.7	6.7	6.4	7.2	6.4	4.7	4.8	4.5
12	6.7	6.9	6.7	6.6	21	6.4	4.5	4.5	4.5
13	6.9	6.9	6.9	6.4	6.4	6.4	4.5	4.5	4.5
14	6.9	6.9	6.9	6.3	6.4	6.3	4.3	4.4	4.3
15	6.9	6.9	6.9	6.3	6.3	6.3	4.3	4.3	4.3
16	6.9	6.9	6.9	6.3	6.3	6.3	4.3	4.3	4.2
17	6.9	6.9	6.9	6.3	6.3	6.3	4.2	4.2	4.1
18	6.9	7.0	6.9	6.3	6.3	6.3	4.1	4.1	4.1
19	7.0	7.0	7.0	6.3	6.3	6.3	4.1	4.1	4.1
20	7.0	7.0	7.0	6.3	6.3	6.3	4.1	4.1	4.1
21	7.0	7.0	7.0	6.3	6.3	6.3	4.1	4.1	4.1
22	10	61	7.0	6.3	6.3	6.1	4.1	4.1	4.1
23	8.0	8.8	7.0	6.1	6.1	6.1	4.1	4.1	4.1
24	7.0	7.0	7.0	6.1	6.1	6.1	4.1	4.1	4.1
25	6.9	7.0	6.9	6.1	6.1	6.1	4.1	4.1	3.9
26	7.2	7.3	7.0	6.1	6.1	6.1	3.9	3.9	3.8
27	7.0	7.0	7.0	6.1	6.1	6.1	3.8	3.8	3.8
28	6.9	7.0	6.9	6.1	6.1	6.1	3.8	3.8	3.8
29	6.7	6.9	6.7	6.1	6.1	6.1	3.8	3.8	3.8
30	6.7	6.7	6.6	6.1	6.1	6.1	3.9	3.9	3.8
31	6.6	6.6	6.4	6.1	6.1	6.0			
SFD	214.7			194.8			138.1		
Ac. Ft.	425.9			386.4			273.9		
Mean	6.9			6.3			4.6		
Max.	10			6.6			6.0		
Min.	6.4			6.1			3.8		

COLORADO PRINTING CO GRAND JUNCTION COLO

TABLE 1.2.1.8-3

JEX-PILAND ENGINEERS & GEOLOGISTS

Discharge In Cubic Feet Per Second   Willow Creek - Shell Station   Water Year October 1982 to September 1983

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.6	0.6	0.7	0.8	1.1	1.7	2.2	1.9	17	10	10	5.1
2	0.6	0.6	0.7	0.8	1.1	1.6	2.2	1.9	16	10	9.7	4.4
3	0.5	0.6	0.7	0.8	1.1	1.5	2.1	1.9	15	10	9.5	4.3
4	0.5	0.6	0.7	0.8	1.1	1.5	1.7	1.9	15	11	9.1	4.3
5	0.5	0.6	0.7	0.8	1.1	1.5	1.7	1.9	14	11	9.0	4.4
6	0.5	0.6	0.7	0.8	1.1	1.4	1.6	2.0	14	12	8.5	4.5
7	0.6	0.6	0.7	0.8	1.1	1.4	1.7	1.9	14	12	8.3	4.4
8	0.5	0.6	0.7	0.8	1.1	1.5	1.7	1.9	15	11	8.1	4.5
9	0.6	0.6	0.7	0.8	1.1	1.5	1.7	2.2	15	9.8	8.0	4.7
10	0.6	0.6	0.7	0.8	1.1	1.8	1.7	2.4	15	9.0	7.8	4.7
11	0.6	0.6	0.7	0.9	1.1	1.7	1.7	2.9	15	8.3	8.8	4.7
12	0.6	0.6	0.7	1.0	1.1	1.7	1.7	3.1	17	8.1	8.8	4.8
13	0.6	0.6	0.7	1.0	1.2	1.6	1.7	3.2	15	8.5	6.3	4.8
14	0.6	0.6	0.7	1.0	1.1	1.7	1.7	2.4	12	8.3	4.4	4.5
15	0.5	0.6	0.6	1.0	1.1	1.7	1.7	3.3	10	8.0	3.9	4.7
16	0.6	0.6	0.8	1.0	1.2	1.7	1.7	4.7	10	7.5	3.6	4.8
17	0.2	0.6	0.8	1.0	1.1	1.7	1.7	4.5	10	6.7	3.6	4.7
18	0.06	0.6	0.7	1.0	1.2	1.7	1.7	5.4	9.7	6.6	3.6	4.7
19	0.04	0.6	0.6	1.1	1.2	1.8	1.7	6.7	9.5	6.6	3.6	4.7
20	0.04	0.6	0.6	1.1	1.2	1.8	1.7	6.0	8.1	6.7	3.6	4.5
21	0.04	0.6	0.7	1.1	1.2	1.8	1.7	5.7	7.3	7.7	3.9	4.5
22	0.09	0.6	0.7	1.1	1.2	1.8	1.7	5.1	7.5	10	4.2	4.4
23	0.1	0.6	0.8	1.1	1.2	1.7	1.7	6.1	8.1	10	4.4	4.3
24	0.1	0.8	0.5	1.1	1.5	1.7	1.7	8.0	9.0	9.5	4.4	4.3
25	0.4	0.7	0.8	1.1	1.5	1.7	1.7	9.7	10	9.1	4.4	4.3
26	0.7	0.6	0.8	1.1	1.4	1.7	1.9	11	9.8	9.7	4.4	4.3
27	0.7	0.6	0.8	1.1	1.4	1.8	2.0	13	9.7	11	4.4	4.3
28	0.6	0.6	0.8	1.1	1.5	1.9	1.9	15	9.3	11	4.4	4.3
29	0.6	0.6	0.8	1.1		2.0	1.9	15	9.7	11	4.4	3.8
30	0.6	0.7	0.8	1.1		2.0	1.9	16	9.8	9.1	4.4	3.9
31	0.6		0.8	1.1		2.3		14		11	5.7	
Total	13.9	18.4	22.2	30.2	33.4	52.9	53.4	180.7	356.4	290.2	187.2	134.6
Ac-ft	27.5	36.5	44.0	59.9	66.2	104.9	105.9	358.4	707.1	575.6	371.3	267.0

COLORADO PRINTING CO., GRAND JUNCTION, COLO

1983 TOTAL SFD. 1,373.5
1983 TOTAL AC.FT. 2,724.3

TABLE 1.2.1.8-4

JEX-PILAND *Engineers & Geologists*

Stream Willow Creek - Shell Station

Year 1983

Discharge in Cubic Feet Per Second

	JULY			AUGUST			SEPTEMBER		
Day	Daily Average	Daily Max.	Daily Min.	Daily Average	Daily Max.	Daily Min.	Daily Average	Daily Max.	Daily Min.
1	10	10	9.7	10	11	9.8	5.1	5.5	4.5
2	10	10	10	9.7	9.8	9.3	4.4	4.5	4.3
3	10	10	10	9.5	10	9.1	4.3	4.3	4.3
4	11	11	10	9.1	9.1	9.1	4.3	4.3	4.1
5	11	11	11	9.0	9.1	8.5	4.4	4.5	4.3
6	12	12	11	8.5	8.5	8.5	4.5	4.5	4.5
7	12	12	11	8.3	8.5	8.0	4.4	4.5	4.4
8	11	11	10	8.1	8.5	8.0	4.5	4.5	4.5
9	9.8	10	9.3	8.0	8.0	7.8	4.7	4.7	4.5
10	9.0	9.3	8.6	7.8	7.8	7.7	4.7	4.7	4.7
11	8.3	8.8	8.0	8.8	20	7.5	4.7	4.7	4.7
12	8.1	8.3	7.8	8.8	10	8.3	4.8	4.8	4.7
13	8.5	8.6	8.3	6.3	8.3	3.9	4.8	4.9	4.7
14	8.3	8.8	8.0	4.4	6.0	3.8	4.5	4.7	4.5
15	8.0	8.1	7.8	3.9	4.7	3.6	4.7	4.7	4.5
16	7.5	8.3	6.7	3.6	3.6	3.6	4.8	4.8	4.7
17	6.7	7.0	6.6	3.6	3.6	3.6	4.7	4.7	4.5
18	6.6	6.7	6.4	3.6	3.6	3.6	4.7	4.7	4.5
19	6.6	6.6	6.4	3.6	3.6	3.6	4.7	4.9	4.5
20	6.7	7.2	6.4	3.6	3.7	3.6	4.5	4.5	4.4
21	7.7	8.0	7.2	3.9	4.2	3.7	4.5	4.5	4.4
22	10	40	7.3	4.2	4.4	4.2	4.4	4.4	4.4
23	10	11	9.5	4.4	4.4	4.4	4.3	4.4	4.3
24	9.5	9.7	9.0	4.4	4.4	4.4	4.3	4.3	4.3
25	9.1	9.3	9.0	4.4	4.4	4.4	4.3	4.3	4.3
26	9.7	10	9.3	4.4	4.4	4.4	4.3	4.3	4.3
27	11	11	10	4.4	4.4	4.4	4.3	4.3	4.3
28	11	12	11	4.4	4.4	4.4	4.3	4.3	4.2
29	11	11	10	4.4	4.4	4.3	3.8	4.2	3.4
30	9.1	11	8.8	4.4	5.5	4.4	3.9	4.1	3.9
31	11	11	11	5.7	6.4	5.5			
SFD	290.2			187.2			134.6		
Ac. Ft.	575.6			371.3			267.0		
Mean	9.4			6.0			4.5		
Max.	12			10			5.1		
Min.	6.6			3.6			3.8		

COLORADO PRINTING CO GRAND JUNCTION COLO

TABLE 1.2.1.8-5

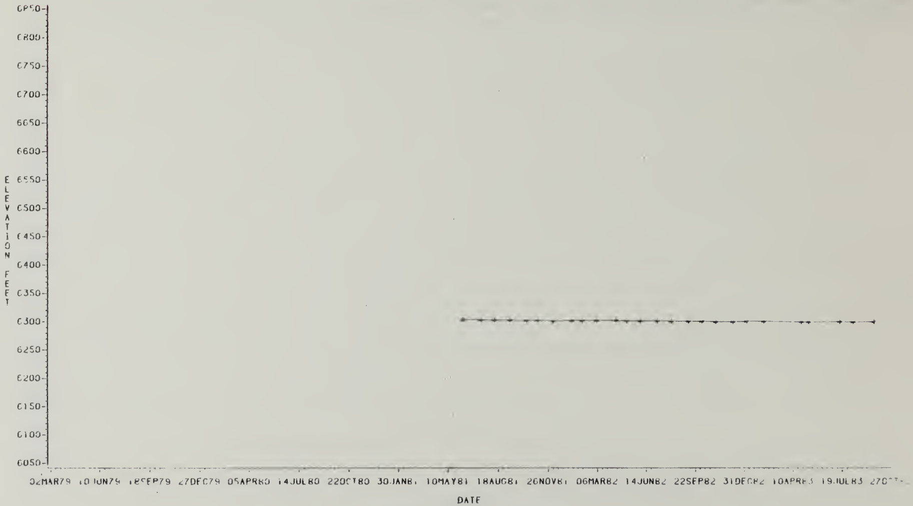
C-a TRACT
MOBIL WELL LEVELS

WELL ID - FT FROM GROUND LEVEL

			MW01	MW02	MW03	MW12	MW13
YR	MO	DY	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)	DEPTH (FT)
83	7	14	6300.6797	6147.6992	6250.5977	6302.1992	6299.4180
	8	10	6300.1992	6146.5992	6250.1992	6302.7969	6299.8477
	9	22	6300.3281	6145.5992	6250.0977	6303.1992	6298.2383

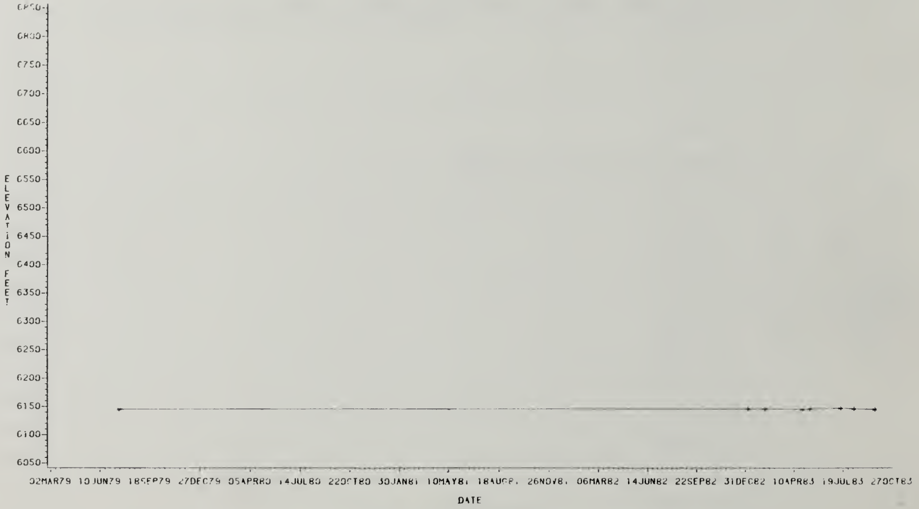
MOBIL WELL LEVELS

LOC=MW01



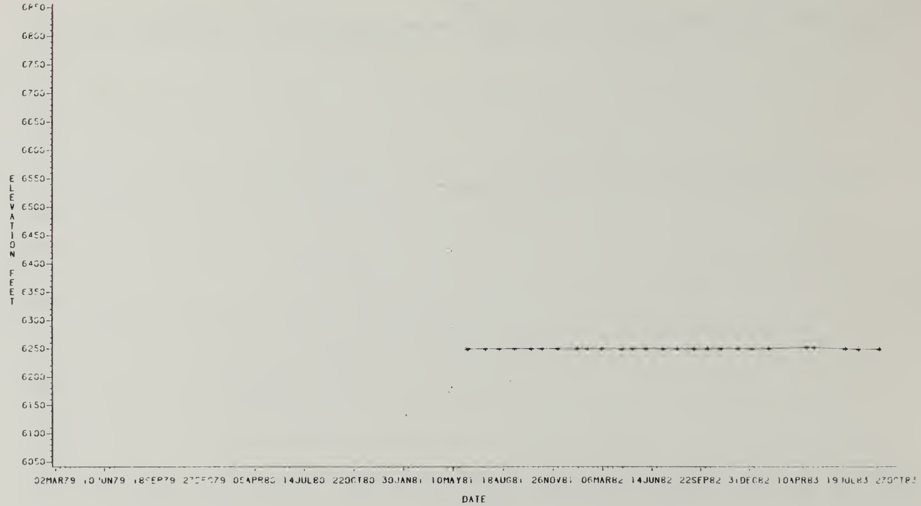
MOBIL WELL LEVELS

LOC=MW02



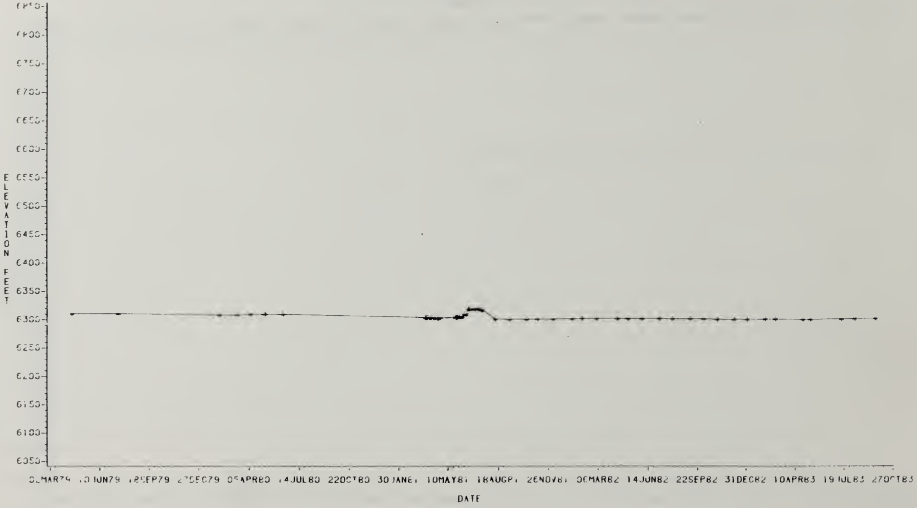
MOBIL WELL LEVELS

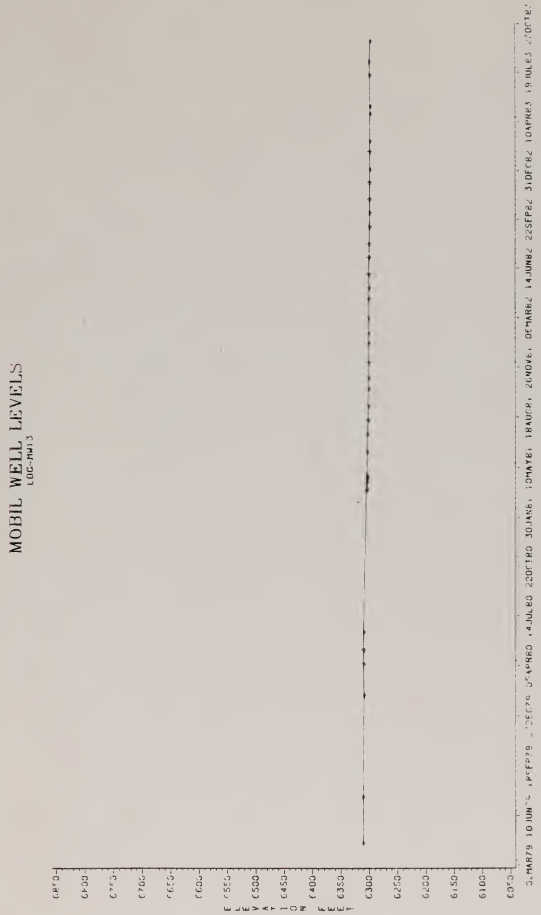
LUG-MW03



MOBIL WELL LEVELS

LOC=MW12





MOBIL WELL LEVELS

LOG-MW13

1.2.2 Water Quality

Water samples taken at USGS surface streams, springs and seeps, alluvial and bedrock wells, seepage wells, discharge points, shafts and shale dumps, were analyzed for various variables depending on the monitoring and reporting requirements of these water stations. Requirements for the Interim Monitoring Plan (IMP), the Water Augmentation Plan (WAP), and the National Pollutant Discharge Elimination System (NPDES) documents are identified within each subsection. Data tables are presented in these subsections for water samples taken in June through November 1983.

1.2.2.1 Surface Streams

Water samples were collected from 8 USGS stream gaging stations along Piceance Creek. Refer to Figure 1.2.1.1-1 in Surface Streams subsection of the Levels and Flows Section 1.2.1 for station locations. Field data reported in this section are for 1982 water year (October 1981 - September 1982). Field data for 1983 water year will not be in the WATSTOR data base until Spring 1984. Data will be reported in the July 15, 1984 Environmental Monitoring Report. Lab analyses for water samples of 1983 water year (October 1982 - September 1983) are included in this section. Table 1.2.2.1-1 describes parameters sampled with corresponding page number of data tables for 12 gaging stations. Only 8 of these are required during the Interim Monitoring Program; 007, 022, 036, 039, 042,, 052, 058 and 061.

Remark codes used in the data tables are defined in Table 1.2.2.1-2.

TABLE 1.2.2.1-1

USGS GAGING STATION SURFACE WATER DATA

Stations	Daily Discharge (Flow)	Daily Mean Sediment & Discharge Data	Daily Dissolved Oxygen	Daily pH Readings	Daily Specific Conductance	Daily Temperature	Water Quality Data
09304800*(WU48)	I-229				I-235	I-238	I-358
09306007*(WU07)	I-241	I-244	I-250	I-253	I-256	I-259	I-370
09306022*(WU22)	I-262	I-265	I-271	I-274	I-277	I-280	I-376
09306036 (WU36)	I-283	I-286					I-382
09306039 (WU39)	I-292						I-388
09306042 (WU42)	I-295	I-298			I-305	I-307	I-394
09306052 (WU52)	I-310						I-400
09306058*(WU58)	I-316	I-319	I-325	I-328	I-331	I-334	I-406
09306061*(WU61)	I-337	I-340	I-346	I-349	I-352	I-355	I-412
09306200*(WU00)							I-418
09306222*(WU62)							I-424
09306224 - New							I-430
09306290 - New							I-442
09306255*(WU55)							I-436

* Major Station

Data were not available in WATSTOR data base for gaging stations showing blanks in parameter columns.

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09304800 WHITE RIVER BELOW MEEKER, CO. STREAM SOURCE AGENCY USGS
LATITUDE 400048 LONGITUDE 1080533 DRAINAGE AREA 1024.00 DATUM 5928.00 STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1			300			370			350			341
2			308			380			340			336
3			335			380			365			322
4			415			385			335			254
5			485			381			340			305
6			421			376			313			352
7			386			371			326			412
8			396			371			322			212
9			479			356			313			243
10			416			341			327			373
11			407			336			322			388
12			444			337			314			378
13			432			347			314			354
14			427			337			314			329
15			433			332			323			349
16			616			332			323			359
17			475			328			315			370
18			428			353			280			355
19			403			353			311			350
20			393			319			354			336
21			383			358			364			347
22			378			348			334			311
23			363			353			302			269
24			359			359			245			360
25			379			359			273			350
26			364			334			330			360
27			369			320			330			315
28			354			359			317			296
29			364			349			299			333
30			420			349			336			289
31			375						351			325
MONTH			403			352			322			331

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09304800 WHITE RIVER BELOW MEEKER, CO. STREAM SOURCE AGENCY USGS
LATITUDE 400048 LONGITUDE 1080533 DRAINAGE AREA 1024.00 DATUM 5928.00 STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1			299			385			377			1010
2			285			442			367			1200
3			314			448			332			1400
4			237			389			362			1720
5			248			347			357			1640
6			294			331			367			1400
7			250			321			362			1270
8			300			306			323			1250
9			270			342			343			1360
10			350			341			338			1440
11			320			345			358			1380
12			300			389			452			1340
13			335			352			494			1420
14			380			361			518			1270
15			380			375			590			1170
16			390			374			597			1120
17			380			382			562			1140
18			380			366			597			1210
19			380			355			619			1370
20			380			340			570			1430
21			380			299			531			1410
22			380			294			531			1590
23			380			326			598			1810
24			370			341			627			1890
25			365			322			725			1740
26			360			346			870			1930
27			390			361			816			2370
28			390			356			795			2550
29						381			886			2410
30						366			854			2370
31						309						2140
MONTH			339			355			537			1570

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09304800 WHITE RIVER BELOW MEEKER, CO. STREAM SOURCE AGENCY USGS
LATITUDE 400048 LONGITUDE 1080533 DRAINAGE AREA 1024.00 DATUM 5928.00 STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1			1910			1980			617			445
2			1870			1900			653			422
3			1780			1680			759			407
4			1790			1590			676			411
5			1810			1510			607			533
6			1960			1460			552			497
7			1730			1290			546			430
8			1910			1190			547			430
9			1780			1260			597			435
10			1930			1240			556			435
11			1760			1120			563			518
12			1670			1090			634			547
13			2020			1010			656			623
14			2030			1000			657			616
15			1980			952			595			608
16			1670			857			517			615
17			1870			843			536			572
18			2030			828			626			520
19			1890			801			564			520
20			1930			760			527			519
21			1750			747			533			507
22			1920			720			510			494
23			1830			693			499			500
24			1710			666			494			493
25			1770			730			494			487
26			1540			689			519			528
27			1660			697			520			573
28			1310			782			501			607
29			2080			864			477			628
30			1920			714			482			641
31						645			476			
MONTH			1830			1040			564			519
YEAR	---	---	682									

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09304800 WHITE RIVER BELOW MEEKER, CO. STREAM SOURCE AGENCY USGS
LATITUDE 400048 LONGITUDE 1080533 DRAINAGE AREA 1024.00 DATUM 5928.00 STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

PROVISIONAL DATA

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1			678			557			413			275
2			621			526			418			330
3			580			469			407			398
4			549			480			395			518
5			547			477			426			555
6			560			477			396			566
7			542			483			383			539
8			552			469			413			510
9			556			471			401			462
10			541			476			427			384
11			523			500			391			394
12			530			481			341			412
13			528			447			398			396
14			520			445			425			385
15			488			431			402			380
16			533			475			402			390
17			524			490			388			403
18			507			465			379			416
19			496			470			353			408
20			491			460			383			392
21			486			444			433			386
22			478			443			372			398
23			462			424			370			388
24			464			398			368			358
25			460			460			359			377
26			485			446			299			390
27			582			403			283			384
28			544			369			310			394
29			479			376			313			386
30			507			381			264			382
31			546						252			370
MONTH			528			456			373			411

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09304800 WHITE RIVER BELOW MEFKER, CO. STREAM SOURCE AGENCY USGS
LATITUDE 400048 LONGITUDE 1080533 DRAINAGE AREA 1024.00 DATUM 5928.00 STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

PROVISIONAL DATA

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1			356									
2			371									
3			335									
4			314									
5			469									
6			681									
7			650									
8			653									
9			656									
10			487									
11			437									
12			420									
13			437									
14			442									
15			422									
16			397									
17			366									
18			316									
19			319									
20			327									
21			302									
22			317									
23			316									
24			323									
25			350									
26			---									
27			---									
28			---									
29												
30												
31												
MONTH			419									

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY   PROCESS DATE IS 10-31-83

STATION NUMBER   09304800   WHITE RIVER BELOW MEEKER, CO.   STREAM   SOURCE AGENCY USGS
LATITUDE   400048   LONGITUDE   1080533   DRAINAGE AREA   1024.00   DATUM   5928.00   STATE 08   COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

PROVISIONAL DATA

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
MONTH												
YEAR	---	---	438									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09304800 WHITE RIVER BELOW MEEKER, CO. STREAM SOURCE AGENCY USGS
LATITUDE 400048 LONGITUDE 1080533 DRAINAGE AREA 1024.00 DATUM 5928.00 STATE 08 COUNTY 103

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	577	542	555	565	553	559
2	697	640	668	620	591	601	593	541	570	574	553	559
3	721	637	674	646	604	627	631	585	609	583	573	577
4	727	632	668	659	610	635	604	585	595	604	581	592
5	726	649	690	670	614	639	613	576	590	607	580	595
6	645	603	621	670	610	630	582	575	578	579	564	571
7	610	584	595	646	614	630	593	576	580	614	571	589
8	638	572	596	627	600	616	586	577	580	644	618	636
9	635	574	604	634	597	623	584	573	579	646	624	636
10	578	560	571	634	608	625	586	575	580	625	588	605
11	572	546	560	644	584	614	605	575	590	589	561	571
12	602	539	569	644	585	610	579	573	575	564	554	559
13	567	538	556	634	575	609	576	570	573	566	559	562
14	565	512	551	608	576	594	574	567	571	580	565	567
15	573	538	552	609	582	595	575	565	570	572	556	566
16	620	556	594	597	570	586	566	554	562	563	548	556
17	---	---	---	600	572	585	565	548	559	558	541	552
18	---	---	---	589	560	576	603	565	575	554	540	547
19	---	---	---	584	560	573	624	564	592	554	544	549
20	---	---	---	630	584	605	564	556	560	590	569	572
21	---	---	---	649	568	610	574	550	563	571	565	568
22	---	---	---	596	562	575	571	553	559	582	560	570
23	---	---	---	604	583	590	615	572	584	590	561	580
24	---	---	---	636	601	620	647	621	629	597	559	584
25	---	---	---	647	607	620	671	614	641	596	549	569
26	---	---	---	610	571	590	614	596	602	596	570	580
27	---	---	---	627	600	618	604	574	588	598	550	570
28	---	---	---	646	546	600	594	578	583	580	512	542
29	---	---	---	587	568	575	607	590	598	595	543	562
30	---	---	---	573	519	550	589	559	574	577	540	554
31	---	---	---	---	---	---	563	555	558	595	553	567
MONTH	727	512	605	670	519	604	671	541	581	646	512	573

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09304800 WHITE RIVER BELOW MEEKER, CO. STREAM SOURCE AGENCY USGS
LATITUDE 400048 LONGITUDE 1080533 DRAINAGE AREA 1024.00 DATUM 5928.00 STATE 08 COUNTY 103

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	563	540	550	700	682	690	639	606	615	400	304	361
2	569	552	561	719	697	713	608	578	596	352	292	310
3	582	561	570	729	711	722	621	591	605	291	276	283
4	606	589	597	717	695	707	623	583	597	307	282	291
5	648	612	633	713	693	703	603	557	580	320	290	302
6	677	655	665	705	678	694	624	594	611	331	315	325
7	691	666	680	695	677	688	615	586	600	344	330	337
8	674	608	630	688	672	681	660	593	603	352	342	345
9	612	592	600	691	674	683	668	600	643	357	329	339
10	616	581	595	706	675	694	643	607	624	353	333	338
11	586	568	574	710	700	706	643	593	612	342	322	327
12	593	570	578	728	704	717	613	570	587	373	337	349
13	595	572	582	715	689	700	594	570	582	460	291	345
14	590	559	570	690	678	683	578	525	550	346	323	337
15	566	549	558	677	668	672	524	475	500	427	319	343
16	567	561	564	679	673	676	490	466	475	402	359	368
17	597	562	570	671	660	665	493	478	486	374	354	361
18	585	554	574	687	665	680	496	472	480	371	276	344
19	608	595	598	704	660	690	475	461	465	373	336	345
20	617	609	612	699	663	673	491	464	472	351	337	340
21	621	613	616	708	644	666	505	477	485	---	---	---
22	625	604	619	714	608	671	511	477	490	---	---	---
23	627	612	622	700	618	653	493	459	475	---	---	---
24	655	622	639	686	599	635	474	450	462	---	---	---
25	672	657	663	669	600	631	463	420	445	---	---	---
26	688	657	669	667	610	637	423	397	407	---	---	---
27	701	661	675	692	650	661	413	397	405	---	---	---
28	689	670	680	694	651	671	426	411	418	---	---	---
29	---	---	---	675	640	655	425	385	400	---	---	---
30	---	---	---	643	605	618	405	385	395	---	---	---
31	---	---	---	649	599	622	---	---	---	269	255	262
MONTH	701	540	609	729	599	676	668	385	522	460	255	331

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09304800 WHITE RIVER BELOW MEEKER, CO. STREAM SOURCE AGENCY USGS
LATITUDE 400048 LONGITUDE 1080533 DRAINAGE AREA 1024.00 DATUM 5928.00 STATE 08 COUNTY 103

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	295	277	285	305	291	299	478	462	470	562	530	545
2	296	278	284	310	294	302	480	463	470	---	---	---
3	298	291	294	326	308	315	529	476	504	---	---	---
4	306	294	301	337	323	329	496	478	485	---	---	---
5	304	277	289	346	335	341	508	480	495	---	---	---
6	290	273	279	360	352	355	533	475	500	---	---	---
7	304	291	296	373	359	365	491	472	480	---	---	---
8	304	285	292	386	376	382	486	471	481	---	---	---
9	306	292	298	405	382	395	494	464	475	---	---	---
10	312	294	301	395	382	388	505	477	489	---	---	---
11	318	309	312	406	396	400	542	497	516	---	---	---
12	318	303	308	413	402	407	558	532	543	---	---	---
13	308	299	302	429	410	423	553	508	533	---	---	---
14	304	293	298	430	414	421	535	504	520	---	---	---
15	308	299	302	423	407	418	532	512	523	---	---	---
16	324	308	316	431	402	420	537	517	525	548	512	526
17	325	300	306	432	414	424	535	510	525	529	506	519
18	305	290	297	425	389	409	529	494	510	532	510	524
19	308	297	302	412	388	403	506	482	500	539	525	532
20	307	299	303	431	410	425	510	492	500	584	522	535
21	309	296	302	444	420	430	509	482	495	548	519	529
22	312	295	304	473	413	445	514	493	510	535	523	528
23	317	307	310	472	458	470	539	490	525	---	---	---
24	319	313	317	470	459	465	515	495	505	---	---	---
25	319	304	310	468	457	460	545	519	536	---	---	---
26	316	305	309	486	468	475	552	526	543	---	---	---
27	309	294	302	482	468	475	548	507	532	---	---	---
28	308	289	296	504	450	485	534	509	523	---	---	---
29	299	278	286	496	447	470	541	512	528	---	---	---
30	292	279	285	467	455	460	536	514	526	---	---	---
31	---	---	---	474	461	465	549	521	536	---	---	---
MONTH	325	273	300	504	291	410	558	462	510	584	506	530
YEAR	729	255	521									

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09304800 WHITE RIVER BELOW MEEKER, CO. STREAM SOURCE AGENCY USGS
LATITUDE 400048 LONGITUDE 1080533 DRAINAGE AREA 1024.00 DATUM 5928.00 STATE 08 COUNTY 103

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	.0	.0	.0	.0	.0	.0
2	12.5	10.0	11.5	5.0	2.0	4.5	.0	.0	.0	.0	.0	.0
3	13.0	10.0	11.0	6.0	2.0	4.0	.5	.0	.0	.0	.0	.0
4	11.0	9.5	10.5	6.5	2.5	4.5	.5	.0	.0	.0	.0	.0
5	11.0	8.5	9.5	6.0	2.5	4.5	2.0	.0	.5	.0	.0	.0
6	12.5	7.0	10.0	6.5	3.0	5.0	2.5	.0	1.0	.0	.0	.0
7	13.0	8.5	10.5	7.0	4.5	6.0	2.5	.0	1.0	.0	.0	.0
8	11.0	9.0	10.0	6.5	3.5	5.0	2.5	.0	1.0	.0	.0	.0
9	10.5	7.5	9.0	6.0	2.5	3.5	2.5	.0	1.0	.0	.0	.0
10	11.5	7.5	9.5	5.0	2.0	4.0	3.0	.5	1.5	.0	.0	.0
11	10.0	8.0	9.0	5.0	1.5	3.0	4.0	.5	2.0	.0	.0	.0
12	10.0	6.5	8.0	5.0	1.5	3.0	3.0	.5	1.5	.0	.0	.0
13	10.5	7.0	9.0	6.0	2.5	4.0	2.5	1.0	2.0	.0	.0	.0
14	10.5	8.0	9.0	6.0	4.0	5.0	1.5	.5	1.0	.0	.0	.0
15	9.5	7.5	8.5	7.0	4.5	5.5	3.5	1.0	2.0	.0	.0	.0
16	---	---	---	7.0	4.0	5.5	1.5	.0	.5	.0	.0	.0
17	---	---	---	5.5	3.0	4.5	.5	.0	.0	.0	.0	.0
18	---	---	---	4.0	1.0	3.0	.0	.0	.0	.0	.0	.0
19	---	---	---	2.5	.0	1.0	1.0	.0	.0	.0	.0	.0
20	---	---	---	.5	.0	.0	4.0	.5	2.0	.0	.0	.0
21	---	---	---	2.0	.0	1.0	3.0	.5	2.0	.0	.0	.0
22	---	---	---	4.0	1.5	2.5	1.5	.0	.5	.0	.0	.0
23	---	---	---	5.0	3.0	3.5	.0	.0	.0	.0	.0	.0
24	---	---	---	5.5	2.5	4.0	.0	.0	.0	.0	.0	.0
25	---	---	---	4.0	1.0	3.5	.0	.0	.0	.0	.0	.0
26	---	---	---	1.0	.0	.0	.0	.0	.0	.0	.0	.0
27	---	---	---	.0	.0	.0	.0	.0	.0	.0	.0	.0
28	---	---	---	.0	.0	.0	.0	.0	.0	.0	.0	.0
29	---	---	---	.0	.0	.0	.0	.0	.0	1.0	.0	.0
30	---	---	---	.0	.0	.0	.0	.0	.0	.0	.0	.0
31	---	---	---	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	13.0	6.5	9.5	7.0	.0	3.0	4.0	.0	.5	1.0	.0	.0

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-8

STATION NUMBER 09304800 WHITE RIVER BELOW MEEKER, CO. STREAM SOURCE AGENCY USGS
LATITUDE 400048 LONGITUDE 1080533 DRAINAGE AREA 1024.00 DATUM 5928.00 STATE 08 COUNTY 103

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	5.0	2.5	4.0	7.5	4.5	6.0	10.5	8.5	9.5
2	.0	.0	.0	7.5	3.5	5.0	7.5	2.5	4.5	10.5	7.5	9.0
3	.0	.0	.0	5.5	3.0	4.0	8.5	2.5	5.5	10.0	8.0	9.5
4	.0	.0	.0	6.0	1.0	3.0	9.0	4.0	6.0	9.5	6.0	7.5
5	.0	.0	.0	5.0	2.0	3.5	7.5	1.5	5.0	8.0	4.5	6.5
6	.0	.0	.0	5.0	.5	2.5	7.5	4.0	6.0	8.5	4.5	6.5
7	.0	.0	.0	4.0	1.5	3.0	5.5	2.0	4.0	8.5	5.5	7.0
8	.0	.0	.0	4.5	1.0	2.5	5.5	.0	3.0	10.5	7.0	8.5
9	.0	.0	.0	7.0	1.5	4.0	8.0	1.5	4.5	9.5	7.5	8.5
10	.0	.0	.0	6.5	3.5	5.0	9.0	2.0	6.0	9.5	7.0	8.0
11	.0	.0	.0	7.0	3.5	5.5	12.0	5.5	9.0	8.5	6.5	7.5
12	.0	.0	.0	8.5	4.5	6.5	10.0	7.0	9.0	7.0	4.5	6.0
13	.0	.0	.0	8.5	2.5	5.5	11.0	5.5	8.5	6.0	4.0	5.0
14	.0	.0	.0	7.5	3.5	6.0	12.0	6.5	9.5	8.5	4.5	6.5
15	.0	.0	.0	8.0	5.0	6.0	10.5	6.5	8.5	10.0	6.5	8.5
16	.0	.0	.0	7.5	4.5	6.0	9.5	5.0	7.0	11.0	8.5	9.5
17	.0	.0	.0	8.5	3.0	5.5	10.0	3.5	7.0	12.0	8.0	10.0
18	1.0	.0	.0	9.0	4.0	6.0	10.5	5.5	8.0	12.0	8.5	10.0
19	.0	.0	.0	6.0	1.5	4.5	6.5	3.0	5.0	11.0	9.0	10.0
20	.0	.0	.0	4.5	.5	2.5	5.0	1.5	3.0	10.5	8.0	9.0
21	.0	.0	.0	3.5	.0	2.0	7.5	.0	4.5	---	---	---
22	.0	.0	.0	5.5	.0	2.5	10.5	3.5	7.5	---	---	---
23	4.0	.0	1.5	7.0	.5	4.0	10.0	6.0	8.0	---	---	---
24	5.0	1.0	3.0	8.0	2.0	5.0	12.0	6.0	9.0	---	---	---
25	6.0	1.0	3.5	9.0	3.0	6.0	12.0	7.5	9.5	---	---	---
26	4.0	1.0	2.5	6.5	5.0	5.5	9.5	7.0	8.0	---	---	---
27	5.5	2.0	3.5	8.0	5.0	6.5	10.0	6.5	8.0	---	---	---
28	7.5	2.5	4.5	9.5	5.0	7.5	12.0	6.0	9.0	---	---	---
29	---	---	---	6.5	2.0	4.5	10.0	7.5	8.5	---	---	---
30	---	---	---	4.5	1.0	2.5	11.0	5.5	8.5	---	---	---
31	---	---	---	7.5	.5	4.0	---	---	---	12.0	7.0	9.5
MONTH	7.5	.0	.5	9.5	.0	4.5	12.0	.0	7.0	12.0	4.0	8.0

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09304800 WHITE RIVER BELOW MEEKER, CO. STREAM SOURCE AGENCY USGS
LATITUDE 400048 LONGITUDE 1080533 DRAINAGE AREA 1024.00 DATUM 5928.00 STATE 08 COUNTY 103

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	11.0	9.0	10.0	15.5	12.5	14.0	20.5	15.0	18.0	14.5	10.0	12.5
2	11.0	8.0	9.5	14.5	11.0	12.5	18.5	16.0	17.5	18.0	12.0	15.0
3	12.0	8.5	10.0	15.5	11.0	13.5	19.0	14.0	16.5	15.0	11.5	13.0
4	12.0	8.0	10.0	15.5	11.5	13.5	20.0	15.0	17.5	---	---	---
5	11.5	8.5	10.0	14.0	11.0	12.5	21.0	15.0	18.5	---	---	---
6	10.5	8.0	9.0	15.5	10.0	12.5	21.5	15.5	18.5	---	---	---
7	11.5	7.5	9.5	16.0	11.0	13.5	21.5	15.5	18.5	---	---	---
8	11.0	8.5	10.0	15.0	12.5	13.5	18.5	15.5	17.0	---	---	---
9	11.5	8.0	9.5	15.0	11.5	13.5	20.5	15.5	18.0	---	---	---
10	11.0	8.5	10.0	17.0	11.0	14.0	19.5	15.5	17.5	---	---	---
11	13.5	9.0	11.0	17.0	13.0	15.0	17.5	14.5	16.0	---	---	---
12	12.0	9.5	10.5	18.0	12.5	15.5	16.5	14.0	15.0	---	---	---
13	12.0	9.0	10.5	16.0	13.5	15.0	15.5	13.5	14.5	---	---	---
14	11.5	8.5	10.0	18.0	12.5	15.0	19.5	14.0	16.5	---	---	---
15	11.0	9.0	10.0	18.0	13.0	15.5	20.5	15.0	18.0	---	---	---
16	14.0	8.5	11.5	18.0	12.5	15.5	20.0	16.0	18.5	14.5	11.5	13.5
17	14.5	10.5	12.5	17.5	14.0	16.0	19.0	16.0	17.5	15.5	12.0	13.5
18	13.0	10.5	11.5	19.0	13.5	16.5	20.5	16.5	18.5	14.5	10.5	13.0
19	13.0	9.5	11.0	19.5	14.0	17.0	21.0	15.5	18.0	13.5	10.5	12.5
20	14.0	10.0	12.0	20.0	14.0	17.0	20.0	16.0	18.5	14.5	10.5	12.5
21	12.5	10.0	11.5	19.0	14.0	16.0	21.0	16.5	18.0	15.0	11.0	13.0
22	11.5	10.5	11.0	20.5	14.5	17.0	20.5	17.5	19.0	---	---	---
23	12.5	9.5	11.0	21.0	16.0	18.5	20.0	15.5	17.5	---	---	---
24	14.5	9.5	12.0	20.5	16.5	18.5	20.5	13.5	16.5	---	---	---
25	13.0	11.0	11.5	18.5	16.0	17.0	15.0	10.0	11.5	---	---	---
26	14.0	9.5	12.0	19.5	17.5	18.5	15.0	10.0	13.0	---	---	---
27	15.5	10.5	13.0	19.5	15.5	17.5	14.5	10.0	12.5	---	---	---
28	16.0	12.0	14.0	18.0	15.0	16.5	15.0	10.0	12.0	---	---	---
29	15.0	12.0	13.5	17.5	13.5	15.5	13.5	10.5	12.0	---	---	---
30	15.0	12.5	13.5	20.0	14.5	17.5	14.5	10.0	12.0	---	---	---
31	---	---	---	20.5	14.5	18.0	15.0	10.0	12.0	---	---	---
MONTH	16.0	7.5	11.0	21.0	10.0	15.5	21.5	10.0	16.5	18.0	10.0	13.0
YEAR	21.5	.0	7.0									

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306007 PICEANCE CREEK BELOW RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394934 LONGITUDE 1081057 DRAINAGE AREA 177.00 DATUM 6366.00 STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1			3.2			6.3			7.1			6.1
2			3.3			5.8			7.1			5.5
3			4.2			5.7			6.8			5.3
4			4.2			5.4			6.7			5.3
5			5.1			4.9			6.6			5.3
6			4.8			5.6			6.6			5.3
7			4.7			7.0			6.8			5.3
8			4.7			7.3			6.8			5.3
9			4.2			7.0			6.8			5.3
10			4.8			6.5			6.7			5.3
11			4.9			8.5			6.5			5.4
12			5.1			9.0			6.6			5.3
13			5.4			9.0			6.8			5.4
14			5.7			9.1			6.7			5.4
15			6.2			9.1			6.7			5.4
16			6.8			8.7			6.8			5.4
17			5.5			8.6			6.4			5.6
18			5.6			9.0			6.5			5.6
19			5.2			8.9			6.6			5.7
20			5.1			9.0			6.8			5.8
21			5.2			8.7			7.1			5.8
22			5.4			8.7			6.6			5.8
23			5.8			8.6			6.5			5.8
24			5.8			8.4			6.5			5.9
25			4.9			8.4			6.3			5.6
26			5.0			7.8			6.3			5.8
27			4.7			7.6			6.3			5.7
28			4.6			7.6			6.2			5.9
29			5.2			7.4			6.2			5.9
30			6.8			7.4			6.2			5.8
31			6.3						6.1			5.8
MONTH			5.1			7.7			6.6			5.6

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306007 PICEANCE CREEK BELOW RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394934 LONGITUDE 1081057 DRAINAGE AREA 177.00 DATUM 6366.00 STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1			5.9			8.2			11			5.5
2			6.0			10			11			6.2
3			5.8			16			9.9			9.5
4			5.8			13			9.9			16
5			5.8			12			9.3			20
6			5.8			9.5			10			16
7			5.8			10			9.5			10
8			5.8			9.6			8.6			8.4
9			5.8			9.1			8.6			6.9
10			5.8			9.2			8.8			7.3
11			5.8			8.8			9.3			7.2
12			5.7			13			9.5			11
13			5.7			15			9.6			21
14			5.6			18			8.3			24
15			5.7			22			11			18
16			5.8			18			12			15
17			6.1			13			8.9			13
18			6.3			14			8.7			12
19			6.6			13			7.6			15
20			7.6			12			6.8			16
21			9.1			9.9			5.6			14
22			11			9.4			4.8			14
23			12			8.4			4.7			13
24			8.9			8.1			5.2			11
25			8.7			7.7			5.3			9.2
26			8.5			8.3			4.2			12
27			8.4			8.7			2.8			16
28			8.2			9.3			2.4			8.8
29						11			1.9			7.0
30						9.3			3.4			9.4
31						8.6						9.5
MONTH			6.9			11			7.6			12

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306007 PICEANCE CREEK BELOW RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394934 LONGITUDE 1081057 DRAINAGE AREA 177.00 DATUM 6366.00 STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1			7.4			3.1			4.2			10
2			7.0			2.8			6.4			10
3			7.1			1.5			6.1			9.8
4			4.8			1.3			7.9			9.7
5			4.0			1.6			8.9			10
6			7.4			2.2			10			13
7			6.5			2.8			11			12
8			5.7			3.9			11			12
9			6.5			4.9			11			12
10			6.7			4.9			13			12
11			7.8			5.6			16			13
12			7.7			5.8			29			13
13			7.2			5.7			16			13
14			8.9			6.0			13			14
15			7.8			7.0			12			13
16			6.7			6.1			12			12
17			6.3			5.0			12			12
18			4.8			4.7			15			12
19			3.4			4.3			12			12
20			5.5			5.1			12			12
21			5.4			4.2			11			12
22			4.3			3.9			12			12
23			4.1			3.4			12			11
24			3.1			3.6			11			10
25			2.5			4.1			11			11
26			2.7			4.7			12			12
27			2.5			5.4			11			12
28			2.2			5.3			11			12
29			2.7			4.7			11			13
30			2.4			4.3			11			13
31						4.0			11			
MONTH			5.4			4.3			12			12
YEAR	---	---	8.0									

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306007 PICEANCE CREEK BELOW RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394934 LONGITUDE 1081057 DRAINAGE AREA 177.00 DATUM 6366.00 STATE 08 COUNTY 103

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1			.36			.32			.65			.70
2			.62			.72			.54			.80
3			1.1			.45			.31			.80
4			.50			.39			.72			.80
5			1.4			.52			.65			.65
6			.82			.73			.57			.65
7			.67			1.2			.80			.90
8			.63			1.1			.77			.66
9			.36			1.4			.80			.72
10			.39			.60			.89			.70
11			.26			2.1			.50			.64
12			.22			2.0			.37			.70
13			.28			1.8			.30			1.2
14			.25			1.3			.27			1.6
15			.85			1.6			.45			1.2
16			1.3			1.2			.62			.76
17			.24			1.0			.62			.80
18			.17			1.3			1.0			.80
19			.22			1.5			.60			1.1
20			.26			1.1			.65			.67
21			.32			1.5			.75			.85
22			.36			1.0			.70			1.0
23			.41			1.0			1.5			1.0
24			.49			1.0			1.5			.75
25			.41			---			1.5			.82
26			.39			.80			1.0			.60
27			.32			.95			1.0			.60
28			30			.60			1.0			1.3
29			1.1			.58			1.0			.60
30			1.7			.50			1.5			1.4
31			.82						.90			1.0
MONTH			1.5			1.0			.79			.86

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306007 PICEANCE CREEK BELOW RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394934 LONGITUDE 1081057 DRAINAGE AREA 177.00 DATUM 6366.00 STATE 08 COUNTY 103

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1			.60			3.5			7.3			2.3
2			.73			11			6.0			5.5
3			.88			27			4.9			18
4			1.3			19			3.5			38
5			.60			14			2.1			61
6			.75			8.0			4.8			30
7			.81			6.4			4.5			8.1
8			.92			4.0			4.5			5.0
9			.64			3.9			3.4			4.3
10			1.0			3.5			4.0			4.4
11			1.1			4.0			4.3			3.4
12			2.7			25			4.4			4.5
13			2.1			31			7.0			23
14			1.0			40			6.9			84
15			2.2			58			17			26
16			1.0			34			16			8.1
17			1.5			17			7.7			7.0
18			.90			13			6.1			8.0
19			2.6			9.0			4.7			8.1
20			4.3			7.8			3.0			10
21			4.3			5.0			2.0			7.6
22			11			4.4			1.5			7.6
23			11			3.0			1.5			7.0
24			4.1			2.7			2.1			4.5
25			3.2			2.0			1.5			2.5
26			3.2			2.7			1.0			5.0
27			2.0			4.0			.45			38
28			4.3			4.1			.32			3.6
29						6.5			.30			2.0
30						4.0			.73			4.0
31						4.0						5.1
MONTH			2.5			12			4.5			14

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306007 PICEANCE CREEK BELOW RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394934 LONGITUDE 1081057 DRAINAGE AREA 177.00 DATUM 6366.00 STATE 08 COUNTY 103

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1			3.0			.30			.68			3.0
2			2.8			.20			1.9			2.6
3			3.0			.10			2.6			2.4
4			1.0			.10			4.4			2.6
5			.43			.20			3.5			3.0
6			1.0			.30			4.4			12
7			1.5			.50			4.0			8.4
8			.80			.90			2.7			5.0
9			1.3			1.2			2.5			7.5
10			1.5			1.0			40			6.2
11			2.0			1.5			34			13
12			2.1			1.6			828			13
13			1.5			1.5			25			8.8
14			2.0			1.5			6.5			14
15			1.4			1.8			6.0			12
16			1.5			1.5			6.5			8.4
17			1.5			1.1			17			6.8
18			1.4			1.0			34			6.5
19			.46			.90			18			6.8
20			1.0			1.5			13			5.8
21			1.2			.90			8.9			5.2
22			.90			.70			8.0			3.6
23			.55			.60			8.5			3.0
24			.29			.70			6.0			3.5
25			.20			.77			6.0			4.2
26			.20			1.0			5.0			4.2
27			.10			1.5			3.0			6.0
28			.10			.97			3.0			4.4
29			.20			.70			3.0			3.5
30			.20			.70			3.0			7.0
31						.50			3.0			
MONTH			1.2			.89			36			6.4
YEAR	---	---	6.9									

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306007 PICEANCE CREEK BELOW RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394934 LONGITUDE 1081057 DRAINAGE AREA 177.00 DATUM 6366.00 STATE 08 COUNTY 103

SEDIMENT, SUSPENDED CONCENTRATION (MG/L), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1			42			19			34			---
2			70			46			28			---
3			93			29			17			---
4			44			27			40			---
5			105			39			---			---
6			63			48			32			---
7			53			62			---			---
8			50			56			42			46
9			32			73			---			50
10			30			34			49			---
11			20			84			---			44
12			16			84			21			---
13			19			73			---			76
14			16			52			15			88
15			51			65			---			74
16			73			52			34			52
17			16			43			36			---
18			11			55			---			---
19			16			---			---			74
20			19			45			---			43
21			23			---			---			---
22			25			43			---			59
23			26			---			---			66
24			31			46			---			---
25			31			---			---			48
26			29			---			---			---
27			25			42			---			---
28			---			29			---			67
29			78			29			---			---
30			92			---			90			72
31			48						---			---
MONTH			42			49			37			61

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306007 PICEANCE CREEK BELOW RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394934 LONGITUDE 1081057 DRAINAGE AREA 177.00 DATUM 6366.00 STATE 08 COUNTY 103

SEDIMENT, SUSPENDED CONCENTRATION (MG/L), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1			---			---			246			153
2			45			318			---			---
3			56			637			184			615
4			84			517			---			853
5			---			437			82			1070
6			48			313			177			665
7			52			234			---			300
8			59			---			---			220
9			41			158			148			---
10			65			---			---			225
11			73			---			170			175
12			124			655			170			150
13			110			769			---			400
14			---			809			310			1130
15			140			979			537			497
16			---			698			512			200
17			93			---			320			200
18			---			350			260			---
19			139			---			230			200
20			202			240			163			---
21			150			---			129			200
22			---			175			---			---
23			---			---			---			200
24			166			124			151			---
25			135			---			---			100
26			140			120			---			---
27			---			---			60			674
28			192			163			50			150
29						218			---			---
30						---			80			---
31						---						200
MONTH			106			417			209			390

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306007 PICEANCE CREEK BELOW RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394934 LONGITUDE 1081057 DRAINAGE AREA 177.00 DATUM 6366.00 STATE 08 COUNTY 103

SEDIMENT, SUSPENDED CONCENTRATION (MG/L), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1			---			---			60			110
2			150			---			110			95
3			---			---			155			90
4			---			---			187			100
5			40			---			---			110
6			---			50			153			335
7			---			---			---			260
8			---			---			90			155
9			75			90			---			230
10			---			---			1070			190
11			---			---			745			346
12			100			100			4310			370
13			---			---			---			250
14			---			---			---			380
15			65			95			---			330
16			---			---			---			260
17			---			85			---			210
18			110			---			---			200
19			50			---			550			210
20			---			110			---			180
21			85			---			300			160
22			---			---			---			110
23			50			---			---			100
24			35			---			---			130
25			---			70			---			140
26			---			---			---			130
27			---			100			---			185
28			---			68			---			135
29			---			---			---			100
30			---			---			---			200
31						---			---			
MONTH			76			85			703			193
YEAR	---	---	188									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306007 PICEANCE CREEK BELOW RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394934 LONGITUDE 1081057 DRAINAGE AREA 177.00 DATUM 6366.00 STATE 08 COUNTY 103

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	10.5	6.8	8.1	12.0	8.4	9.8	11.6	10.6	10.9	9.9	9.1	9.6
2	10.1	7.7	8.5	12.2	8.2	9.4	11.3	9.9	10.6	10.4	9.8	10.1
3	10.3	7.6	8.4	11.8	8.2	9.5	11.3	9.7	10.4	10.5	9.6	10.0
4	9.6	7.7	8.4	12.0	8.1	9.5	11.2	9.5	10.3	10.4	8.3	9.8
5	10.5	7.9	8.9	12.3	8.1	9.7	10.6	9.3	9.9	10.0	8.2	9.5
6	10.8	7.6	9.0	12.2	8.3	9.6	10.8	9.3	10.0	10.2	9.6	9.8
7	10.9	7.5	8.9	11.1	8.3	9.3	10.7	9.3	9.9	---	---	---
8	10.2	7.7	8.5	11.4	8.6	9.6	10.8	9.3	9.9	11.1	10.7	10.8
9	11.4	7.9	9.1	11.3	8.5	9.6	10.8	9.2	9.9	11.0	10.5	10.7
10	11.2	7.6	9.1	11.4	8.6	9.8	10.4	9.0	9.6	10.9	10.5	10.6
11	10.7	7.8	8.7	11.1	8.7	9.6	10.3	8.8	9.4	10.7	10.2	10.5
12	10.9	7.6	9.0	11.2	8.7	9.7	10.5	8.8	9.5	10.5	10.1	10.3
13	10.9	7.6	8.9	11.2	8.7	9.6	10.1	9.1	9.5	10.6	9.9	10.3
14	10.6	7.8	8.9	10.9	8.6	9.5	10.3	9.1	9.6	10.6	9.9	10.2
15	10.7	8.0	8.8	11.1	8.5	9.5	9.9	8.7	9.2	10.6	10.0	10.2
16	10.8	8.3	9.2	11.0	8.6	9.5	10.4	9.2	10.0	10.4	9.5	10.0
17	11.1	8.1	9.1	11.8	9.1	10.0	11.3	10.3	10.7	10.2	9.4	9.8
18	11.2	8.0	9.2	11.6	9.6	10.2	11.3	10.3	10.7	10.1	9.2	9.5
19	11.2	7.9	9.3	11.8	9.9	10.6	10.8	9.4	10.1	10.3	9.2	9.7
20	11.3	7.9	9.2	11.9	9.7	10.7	10.4	9.1	9.7	10.8	9.2	9.6
21	11.3	8.1	9.3	11.7	9.6	10.4	10.4	9.4	9.7	---	---	---
22	11.6	8.1	9.6	11.3	9.2	10.1	10.9	9.8	10.2	---	---	---
23	11.5	8.0	9.5	11.3	9.2	9.9	11.3	10.3	10.7	---	---	---
24	11.1	8.5	9.4	11.2	9.0	10.0	11.0	10.4	10.8	---	---	---
25	12.1	8.2	9.5	11.0	9.5	10.3	10.8	10.2	10.4	10.3	9.1	9.7
26	12.4	8.0	9.6	11.6	10.3	10.9	10.8	9.9	10.3	10.3	9.4	9.8
27	12.5	7.9	9.6	11.5	10.0	10.7	10.3	10.0	10.2	10.6	9.3	10.0
28	12.5	7.9	9.5	11.6	9.9	10.7	10.5	10.2	10.3	10.2	9.4	9.9
29	12.4	7.9	9.2	11.3	9.9	10.5	10.6	10.0	10.3	10.6	10.0	10.3
30	12.2	8.8	10.0	11.3	10.1	10.6	10.0	9.3	9.7	10.5	9.5	10.1
31	12.1	8.8	10.1	---	---	---	10.5	9.5	9.9	10.4	9.5	10.0
MONTH	12.5	6.8	9.1	12.3	8.1	10.0	11.6	8.7	10.1	11.1	8.2	10.0

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306007 PICEANCE CREEK BELOW RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394934 LONGITUDE 1081057 DRAINAGE AREA 177.00 DATUM 6366.00 STATE 08 COUNTY 103

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	10.5	9.6	10.1	10.1	8.6	9.3	9.2	7.7	8.5	11.1	7.4	9.0
2	10.3	9.6	10.0	9.4	8.1	9.0	9.5	8.0	8.7	12.4	7.1	9.5
3	10.3	9.7	9.9	10.0	9.3	9.5	9.4	7.2	8.3	10.0	7.1	8.5
4	10.2	9.6	9.8	10.4	8.9	9.7	8.7	7.2	8.0	8.8	8.1	8.4
5	10.0	9.7	9.8	10.4	8.2	9.9	9.1	7.1	8.1	9.7	7.7	8.9
6	9.8	9.6	9.7	10.8	8.9	10.0	9.0	7.1	8.3	10.3	7.4	8.9
7	9.9	9.6	9.7	10.4	8.4	9.6	10.0	9.1	9.6	10.1	7.9	8.8
8	10.0	9.6	9.7	10.5	9.1	9.8	10.4	8.7	9.7	9.2	7.4	8.2
9	9.8	9.6	9.7	10.7	8.9	9.8	10.7	8.5	9.4	9.2	7.6	8.2
10	9.8	9.6	9.7	10.2	8.9	9.7	10.7	7.8	9.4	9.5	7.4	8.5
11	10.0	9.5	9.7	10.0	8.7	9.4	10.0	7.9	8.9	9.1	7.3	8.3
12	10.0	9.1	9.6	10.0	8.7	9.4	9.5	7.4	8.8	9.9	7.8	9.0
13	9.4	8.5	9.0	10.8	8.4	9.7	10.0	7.3	8.6	9.7	7.9	8.8
14	9.4	8.2	8.8	10.7	9.0	9.8	9.9	7.1	8.5	9.3	7.4	8.4
15	9.3	8.4	8.9	10.1	9.1	9.7	9.5	7.3	8.5	9.4	7.2	8.2
16	9.4	7.9	8.8	10.3	9.0	9.7	9.7	7.6	8.6	9.2	7.1	8.0
17	9.8	8.1	8.9	10.6	8.4	9.6	10.0	7.2	8.6	9.1	7.0	8.0
18	---	---	---	10.5	8.8	9.7	9.5	7.8	8.5	9.1	7.5	7.9
19	---	---	---	10.7	9.8	10.3	9.8	7.9	8.8	9.2	7.8	8.3
20	10.6	8.6	9.6	11.1	9.6	10.5	9.8	7.9	9.2	9.4	7.2	8.5
21	10.3	8.4	9.5	11.4	9.6	10.7	10.1	7.4	8.9	9.9	6.8	8.4
22	10.2	8.6	9.5	11.4	9.4	10.5	10.0	6.9	8.6	9.9	7.2	8.5
23	9.7	8.7	9.4	11.3	7.5	10.0	9.5	7.4	8.5	10.2	6.8	8.7
24	10.2	8.6	9.4	11.1	8.7	10.0	9.8	6.7	8.3	11.1	7.1	9.1
25	10.1	8.2	9.3	11.0	8.4	9.7	9.6	6.9	8.2	11.2	6.7	9.2
26	10.4	8.0	9.3	10.1	9.2	9.7	9.9	7.1	8.4	11.2	6.4	8.9
27	9.9	8.6	9.3	9.9	8.7	9.3	10.7	7.9	9.3	10.5	6.8	7.8
28	10.0	8.1	9.1	9.9	8.1	9.0	10.7	7.1	8.9	9.3	7.0	8.2
29	---	---	---	9.6	7.6	9.2	11.5	7.6	9.0	9.6	6.8	8.0
30	---	---	---	10.1	7.7	9.6	12.8	7.1	9.9	9.5	7.2	8.1
31	---	---	---	10.2	7.8	9.1	---	---	---	9.7	6.2	8.2
MONTH	10.6	7.9	9.5	11.4	7.5	9.7	12.8	6.7	8.8	12.4	6.2	8.5

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY   PROCESS DATE IS 10-31-83

STATION NUMBER 09306007   PICEANCE CREEK BELOW RIO BLANCO, CO.   STREAM   SOURCE AGENCY USGS
LATITUDE 394934   LONGITUDE 1081057   DRAINAGE AREA 177.00   DATUM 6366.00   STATE 08   COUNTY 103

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.6	6.6	8.1	8.0	6.1	7.2	8.6	5.2	6.9	10.0	7.0	8.5
2	9.7	6.4	8.1	8.7	6.2	7.5	7.8	5.7	6.6	9.9	6.9	8.4
3	9.8	6.0	7.9	8.5	5.9	7.4	8.6	5.6	7.1	9.7	6.9	8.3
4	9.5	5.8	7.8	8.5	6.1	7.3	8.5	5.5	6.8	9.3	7.0	8.2
5	8.9	5.8	7.5	8.3	6.6	7.6	8.2	5.2	6.8	9.2	6.0	7.9
6	8.1	5.8	7.1	8.4	6.3	7.4	8.2	5.5	6.7	8.4	7.0	7.7
7	7.9	5.3	7.1	8.5	6.3	7.5	7.9	5.7	6.8	9.4	7.2	8.3
8	9.6	6.0	7.8	8.6	6.6	7.3	8.1	5.6	6.7	9.7	7.2	8.2
9	9.7	6.6	8.3	8.3	6.2	7.3	8.3	5.3	6.7	9.3	7.2	7.9
10	9.5	6.6	8.3	8.5	6.1	7.3	7.4	5.6	6.5	9.7	6.8	8.1
11	9.3	6.3	8.0	8.1	6.3	7.2	7.8	6.8	7.4	8.2	7.2	7.6
12	9.1	6.0	7.8	8.2	6.1	7.2	---	---	---	9.2	7.2	7.9
13	9.2	6.5	7.9	8.2	6.4	7.2	---	---	---	8.9	7.6	8.1
14	9.1	7.0	7.9	8.2	6.0	7.1	---	---	---	8.5	7.8	8.1
15	9.1	6.7	8.0	8.3	6.2	7.2	8.0	6.4	7.2	9.3	7.4	8.4
16	9.2	6.1	7.8	8.4	6.1	7.4	7.8	6.0	7.1	9.5	7.1	8.3
17	8.7	6.2	7.5	8.3	6.1	7.2	7.8	6.2	7.1	9.1	7.0	8.0
18	9.1	6.6	7.7	8.5	6.3	7.3	7.7	6.4	7.1	9.3	7.1	8.0
19	9.4	6.5	8.1	9.0	5.8	7.5	7.8	6.1	7.0	9.3	6.9	7.9
20	8.4	5.6	7.2	9.1	6.1	7.3	7.9	6.1	7.2	9.2	6.8	7.7
21	8.4	6.1	7.1	9.4	5.9	7.6	7.7	6.4	7.0	9.0	7.2	7.9
22	9.0	6.5	7.5	8.8	5.6	7.1	7.3	6.7	7.0	9.7	7.0	8.2
23	10.3	6.0	7.8	9.4	5.5	7.2	7.7	6.0	6.9	9.6	6.9	8.1
24	9.8	5.9	7.8	9.4	5.7	7.1	6.9	6.2	6.6	9.7	6.8	8.2
25	9.5	6.5	7.5	9.5	5.5	7.2	7.5	6.7	7.1	8.9	7.1	7.8
26	9.7	6.1	8.0	9.2	5.6	7.1	7.6	6.2	7.0	8.7	6.5	7.4
27	9.6	5.8	7.7	9.0	5.5	6.9	7.5	5.6	6.7	8.3	6.8	7.3
28	9.0	5.7	7.4	9.1	5.8	7.0	---	---	---	8.8	7.2	7.7
29	8.5	5.8	7.3	9.7	5.8	7.6	---	---	---	8.7	7.1	7.7
30	8.4	5.7	7.1	9.6	5.6	7.6	---	---	---	8.4	7.0	7.5
31	---	---	---	9.2	5.5	7.4	8.7	7.3	7.7	---	---	---
MONTH	10.3	5.3	7.7	9.7	5.5	7.3	8.7	5.2	7.0	10.0	6.0	8.0
YEAR	12.8	5.2	8.8									

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306007 PICEANCE CREEK BELOW RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394934 LONGITUDE 1081057 DRAINAGE AREA 177.00 DATUM 6366.00 STATE 08 COUNTY 103

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.2	7.9	8.0	8.1	7.9	8.0	8.4	8.2	8.3	8.6	8.5	8.5
2	8.0	7.8	7.9	8.1	7.8	7.9	8.4	8.2	8.3	8.6	8.5	8.5
3	8.1	7.8	7.9	8.1	7.8	7.9	8.4	8.2	8.3	8.5	8.4	8.5
4	8.0	7.8	7.9	8.1	7.8	7.9	8.4	8.2	8.3	8.5	8.4	8.5
5	8.1	7.8	7.9	8.1	7.8	7.9	8.4	8.2	8.3	8.6	8.5	8.5
6	8.2	7.9	8.0	8.1	7.8	8.0	8.4	8.2	8.3	8.6	8.5	8.6
7	8.2	7.9	8.0	8.2	7.9	8.0	8.4	8.2	8.3	---	---	---
8	8.1	7.8	7.9	8.2	7.9	8.0	8.4	8.2	8.3	8.4	8.3	8.4
9	8.2	7.8	8.0	8.2	7.9	8.0	8.4	8.2	8.3	8.4	8.3	8.3
10	8.2	7.9	8.0	8.2	7.9	8.0	8.4	8.2	8.3	8.5	8.3	8.4
11	8.1	7.9	8.0	8.3	7.9	8.1	8.4	8.2	8.3	8.5	8.4	8.4
12	8.2	7.9	8.0	8.3	8.0	8.1	8.4	8.2	8.3	8.5	8.4	8.5
13	8.3	7.9	8.0	8.4	8.1	8.2	8.4	8.2	8.3	8.5	8.5	8.5
14	8.2	7.9	8.0	8.4	8.1	8.2	8.4	8.3	8.3	8.6	8.4	8.5
15	8.2	7.9	8.0	8.4	8.1	8.2	8.4	8.3	8.3	8.5	8.4	8.5
16	8.2	7.9	8.0	8.4	8.1	8.2	8.4	8.2	8.3	8.6	8.5	8.5
17	8.2	7.9	8.0	8.5	8.1	8.2	8.4	8.3	8.3	8.6	8.5	8.5
18	8.2	7.9	8.0	8.4	8.2	8.2	8.4	8.2	8.3	8.6	8.5	8.5
19	8.2	7.9	8.0	8.4	8.2	8.3	8.4	8.3	8.3	8.6	8.5	8.5
20	8.2	7.9	8.0	8.4	8.2	8.3	8.5	8.3	8.4	8.6	8.5	8.5
21	8.2	7.9	8.0	8.4	8.2	8.3	8.4	8.3	8.3	---	---	---
22	8.2	7.9	8.1	8.5	8.2	8.3	8.5	8.3	8.4	---	---	---
23	8.2	7.9	8.0	8.4	8.2	8.3	8.5	8.3	8.4	---	---	---
24	8.2	7.9	8.0	8.5	8.2	8.3	8.4	8.3	8.4	---	---	---
25	8.2	7.9	8.0	8.4	8.2	8.2	8.4	8.3	8.3	8.6	8.5	8.5
26	8.3	7.9	8.0	8.4	8.2	8.3	8.4	8.3	8.4	8.6	8.5	8.6
27	8.3	7.9	8.0	8.4	8.2	8.3	8.4	8.4	8.4	8.6	8.5	8.5
28	8.3	7.9	8.0	8.4	8.2	8.3	8.4	8.4	8.4	8.6	8.5	8.6
29	8.3	7.8	8.0	8.4	8.2	8.3	8.4	8.3	8.4	8.6	8.5	8.5
30	8.2	7.9	8.0	8.4	8.2	8.3	8.5	8.1	8.4	8.6	8.5	8.5
31	8.1	7.9	8.0	---	---	---	8.5	8.4	8.5	8.6	8.5	8.6
MONTH	8.3	7.8	8.0	8.5	7.8	8.2	8.5	8.1	8.3	8.6	8.3	8.5

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306007 PICEANCE CREEK BELOW RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394934 LONGITUDE 1081057 DRAINAGE AREA 177.00 DATUM 6366.00 STATE 08 COUNTY 103

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	8.6	8.5	8.5	8.4	8.3	8.4	8.5	8.4	8.4	8.5	8.2	8.3
2	8.6	8.4	8.5	8.5	8.3	8.4	8.5	8.4	8.4	8.7	8.2	8.4
3	8.5	8.4	8.5	8.3	8.2	8.3	8.5	8.4	8.4	8.6	8.3	8.3
4	8.4	8.3	8.4	8.4	8.3	8.3	8.5	8.4	8.4	8.3	8.2	8.2
5	8.4	8.3	8.3	8.4	8.3	8.4	8.5	8.3	8.4	8.5	8.2	8.4
6	8.4	8.3	8.3	8.5	8.3	8.4	8.4	8.3	8.4	8.5	8.3	8.4
7	8.4	8.3	8.4	8.5	8.3	8.4	8.4	8.3	8.4	8.5	8.2	8.3
8	8.5	8.4	8.4	8.4	8.3	8.4	8.4	8.3	8.3	8.5	8.1	8.3
9	8.5	8.4	8.4	8.4	8.3	8.4	8.5	8.3	8.4	8.5	8.1	8.2
10	8.5	8.4	8.5	8.4	8.3	8.4	8.5	8.3	8.4	8.3	8.1	8.2
11	8.6	8.5	8.5	8.4	8.3	8.4	8.5	8.3	8.4	8.2	8.0	8.1
12	8.6	8.5	8.5	8.4	8.3	8.4	8.4	8.3	8.4	8.2	8.0	8.1
13	8.6	8.5	8.6	8.5	8.3	8.4	8.6	8.3	8.4	8.3	8.2	8.2
14	8.6	8.5	8.6	8.4	8.3	8.4	8.5	8.4	8.4	8.3	8.2	8.2
15	8.6	8.5	8.5	8.4	8.3	8.3	8.5	8.3	8.4	8.3	8.2	8.2
16	8.6	8.5	8.5	8.5	8.3	8.4	8.5	8.3	8.4	8.4	8.2	8.3
17	8.6	8.5	8.5	8.5	8.3	8.4	8.6	8.3	8.4	8.4	8.0	8.2
18	---	---	---	8.5	8.4	8.4	8.5	8.3	8.4	8.3	8.0	8.1
19	---	---	---	8.4	8.4	8.4	8.5	8.2	8.3	8.3	8.0	8.1
20	8.6	8.4	8.5	8.5	8.4	8.4	8.4	8.2	8.3	8.4	8.2	8.3
21	8.6	8.3	8.4	8.5	8.4	8.4	8.5	8.1	8.3	8.4	8.2	8.3
22	8.5	8.2	8.4	8.5	8.4	8.4	8.5	8.2	8.3	8.4	8.1	8.2
23	8.4	8.2	8.3	8.5	8.4	8.4	8.4	8.2	8.3	8.5	8.1	8.3
24	8.5	8.3	8.4	8.5	8.1	8.4	8.5	8.2	8.3	8.5	8.0	8.2
25	8.5	8.4	8.4	8.5	8.3	8.4	8.5	8.2	8.3	8.5	8.0	8.2
26	8.5	8.4	8.4	8.4	8.4	8.4	8.5	8.1	8.2	8.5	8.0	8.2
27	8.5	8.3	8.4	8.5	8.3	8.4	8.6	8.0	8.2	8.4	8.0	8.2
28	8.5	8.3	8.4	8.5	8.4	8.4	8.7	8.1	8.3	8.2	8.0	8.1
29	---	---	---	8.4	8.4	8.4	8.7	8.1	8.3	8.3	7.9	8.1
30	---	---	---	8.4	8.4	8.4	8.6	8.1	8.3	8.2	8.0	8.1
31	---	---	---	8.5	8.3	8.4	---	---	---	8.4	7.9	8.1
MONTH	8.6	8.2	8.4	8.5	8.1	8.4	8.7	8.0	8.4	8.7	7.9	8.2

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306007 PICEANCE CREEK BELOW RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394934 LONGITUDE 1081057 DRAINAGE AREA 177.00 DATUM 6366.00 STATE 08 COUNTY 103

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.4	8.0	8.2	8.3	8.0	8.1	8.4	8.0	8.1	8.7	8.2	8.4
2	8.4	8.0	8.1	8.4	7.8	8.0	8.3	8.0	8.2	8.7	8.2	8.4
3	8.5	8.0	8.2	8.3	7.9	8.0	8.5	7.9	8.2	8.7	8.2	8.4
4	8.4	8.0	8.2	8.3	7.9	8.1	8.5	8.0	8.2	8.6	8.2	8.4
5	8.4	7.9	8.1	8.2	7.9	8.0	8.6	8.1	8.3	8.6	8.2	8.3
6	8.4	8.0	8.2	8.2	7.9	8.0	8.5	8.1	8.3	8.4	8.0	8.2
7	8.3	8.0	8.2	8.1	7.8	8.0	8.5	8.2	8.3	8.5	8.2	8.3
8	8.3	8.0	8.1	8.2	7.9	8.0	8.5	8.2	8.3	8.5	8.2	8.3
9	8.4	7.9	8.1	8.2	7.9	8.0	8.6	8.1	8.3	8.4	8.2	8.3
10	8.3	7.9	8.1	8.2	7.9	8.0	8.4	8.0	8.2	8.5	8.2	8.3
11	8.4	7.9	8.1	8.2	7.9	8.1	8.3	8.1	8.2	8.3	8.2	8.2
12	8.3	7.9	8.1	8.2	7.9	8.0	---	---	---	8.5	8.1	8.3
13	8.4	7.9	8.1	8.2	7.9	8.0	---	---	---	8.3	8.1	8.2
14	8.3	7.9	8.0	8.2	7.9	8.1	---	---	---	8.2	8.0	8.1
15	8.2	7.8	8.0	8.3	8.0	8.1	8.4	8.2	8.3	8.5	8.0	8.3
16	8.4	7.9	8.1	8.3	7.9	8.1	8.4	8.2	8.3	8.5	8.1	8.3
17	8.3	7.9	8.1	8.3	8.0	8.1	8.5	8.1	8.3	8.5	8.2	8.3
18	8.1	7.8	8.0	8.4	8.0	8.1	8.4	8.2	8.3	8.4	8.1	8.3
19	8.2	7.8	7.9	8.4	8.1	8.2	8.5	8.2	8.4	8.4	8.1	8.3
20	8.2	7.9	8.0	8.4	8.1	8.2	8.5	8.3	8.4	8.5	8.1	8.3
21	8.1	7.9	8.0	8.4	8.0	8.2	8.5	8.3	8.4	8.6	8.1	8.3
22	8.1	7.9	8.0	8.3	7.9	8.1	8.4	8.3	8.3	8.5	8.1	8.3
23	8.4	7.9	8.1	8.4	7.9	8.1	8.5	8.2	8.3	8.6	8.2	8.3
24	8.2	7.8	8.0	8.4	8.0	8.1	8.6	8.3	8.4	8.5	8.1	8.3
25	8.2	7.8	7.9	8.4	7.9	8.1	8.5	8.3	8.3	8.4	8.1	8.3
26	8.3	7.7	8.0	8.3	7.9	8.1	8.5	8.2	8.4	8.5	8.2	8.3
27	8.3	7.9	8.0	8.4	7.9	8.1	8.5	8.2	8.4	8.4	8.2	8.2
28	8.3	7.9	8.1	8.3	7.9	8.0	8.6	8.2	8.4	8.3	8.0	8.1
29	8.3	7.9	8.1	8.4	7.9	8.1	8.6	8.2	8.4	8.3	8.0	8.1
30	8.3	7.9	8.1	8.5	7.9	8.2	8.6	8.2	8.4	8.3	8.0	8.2
31	---	---	---	8.4	8.0	8.2	8.7	8.2	8.4	---	---	---
MONTH	8.5	7.7	8.1	8.5	7.8	8.1	8.7	7.9	8.3	8.7	8.0	8.3
YEAR	8.7	7.7	8.3									

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY   PROCESS DATE IS 10-31-83

STATION NUMBER 09306007   PICEANCE CREEK BELOW RIO BLANCO, CO.   STREAM   SOURCE AGENCY USGS
LATITUDE 394934   LONGITUDE 1081057   DRAINAGE AREA 177.00   DATUM 6366.00   STATE 08   COUNTY 103

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	1270	1210	1240	1220	1190	1210	1150	1080	1110	1080	1050	1070
2	1270	1240	1250	1240	1200	1220	1110	1100	1100	1090	1060	1080
3	1250	1210	1230	1250	1230	1240	1110	1100	1100	1130	1060	1090
4	1260	1210	1240	1240	1220	1230	1130	1100	1100	1130	1070	1100
5	1250	1220	1230	1240	1220	1230	1100	1100	1100	1080	1040	1070
6	1240	1210	1230	1260	1200	1240	1100	1100	1100	1120	1070	1090
7	1240	1210	1220	1210	1190	1200	1100	1090	1100	---	---	---
8	1240	1180	1210	1210	1190	1200	1100	1090	1100	1180	1120	1140
9	1270	1210	1250	1210	1190	1200	1100	1090	1100	1150	1090	1130
10	1230	1210	1220	1220	1200	1210	1100	1090	1100	1120	1060	1100
11	1230	1180	1210	1220	1140	1180	1100	1090	1090	1100	1060	1080
12	1230	1180	1210	1160	1120	1140	1100	1090	1090	1090	1060	1080
13	1220	1180	1210	1140	1110	1130	1100	1080	1090	1100	1060	1090
14	1220	1190	1210	1140	1110	1130	1100	1090	1090	1120	1070	1090
15	1230	1160	1200	1130	1100	1120	1100	1080	1090	1130	1080	1100
16	1220	1170	1210	1130	1110	1120	1100	1070	1080	1100	1090	1100
17	1240	1210	1230	1130	1100	1130	1120	1060	1080	1090	1080	1090
18	1240	1210	1230	1130	1090	1110	1160	1060	1110	1090	1090	1090
19	1240	1200	1230	1130	1110	1120	1090	1080	1090	1090	1090	1090
20	1240	1200	1230	1120	1090	1110	1090	1080	1090	1090	1080	1090
21	1240	1210	1230	1120	1100	1110	1090	1060	1060	---	---	---
22	1240	1210	1230	1120	1090	1110	1090	1070	1080	---	---	---
23	1240	1200	1220	1110	1090	1100	1130	1110	1120	---	---	---
24	1210	1180	1200	1110	1050	1100	1190	1110	1160	---	---	---
25	1210	1170	1200	1110	1070	1090	1090	1060	1080	1090	1060	1080
26	1200	1180	1190	1140	1090	1110	1160	1110	1110	1090	1070	1080
27	1200	1170	1190	1140	1090	1110	1100	1080	1090	1130	1070	1100
28	1210	1180	1190	1110	1100	1100	1160	1080	1150	1090	1080	1080
29	1210	1150	1190	1110	1090	1100	1100	1040	1080	1150	1050	1100
30	1190	1160	1180	1110	1090	1100	1080	1040	1050	1130	1060	1090
31	1230	1190	1200	---	---	---	1080	1050	1060	1090	1060	1080
MONTH	1270	1150	1220	1260	1050	1150	1190	1040	1100	1180	1040	1090

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306007 PICEANCE CREEK BELOW RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394934 LONGITUDE 1081057 DRAINAGE AREA 177.00 DATUM 6366.00 STATE 08 COUNTY 103

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1110	1070	1090	1080	1000	1050	1000	962	980	1120	1000	1060
2	1140	1060	1100	1060	1020	1050	999	969	984	1120	1010	1060
3	1170	1120	1150	1030	800	946	1000	978	986	1010	982	999
4	1210	1130	1180	1020	935	978	991	969	983	988	840	882
5	1210	1140	1170	1040	971	1020	1000	956	985	908	846	869
6	1170	1100	1140	1080	990	1050	987	967	977	1010	911	942
7	1120	1050	1080	1060	1010	1040	986	944	966	1050	1000	1020
8	1170	1060	1120	1050	1010	1040	1040	949	997	1210	1050	1090
9	1080	1030	1070	1050	1000	1030	1000	962	986	1200	1110	1150
10	1110	1040	1080	1040	977	1010	1000	965	987	1240	1090	1140
11	1150	1020	1090	1040	983	1020	998	978	989	1190	1130	1150
12	1120	1030	1080	1070	904	980	987	957	974	1190	946	1080
13	1070	1050	1070	971	909	945	976	932	952	1020	917	966
14	1080	1050	1070	937	871	905	976	954	964	1110	1020	1080
15	1080	1030	1060	872	836	856	949	843	897	1110	1010	1060
16	1080	1030	1060	939	837	892	885	845	872	1100	1060	1080
17	1080	1030	1060	975	909	941	932	868	882	1180	1080	1120
18	---	---	---	994	942	967	922	890	905	1160	1110	1130
19	---	---	---	1000	971	983	966	902	922	1140	1080	1110
20	1070	862	988	1010	977	989	1020	936	982	1120	1070	1090
21	1040	630	905	1020	968	998	1090	1010	1050	1130	1090	1110
22	1020	622	832	1020	965	998	1090	1060	1070	1150	1090	1120
23	986	708	858	1020	979	998	1130	1080	1100	1140	1100	1130
24	1020	816	959	1010	982	995	1110	1080	1100	1180	1140	1150
25	1050	808	1010	1000	987	997	1140	1110	1120	1220	1150	1180
26	1070	970	1030	1000	980	988	1230	1140	1160	1150	1090	1120
27	1060	982	1030	991	963	980	1260	1190	1220	1150	1050	1110
28	1070	1010	1050	992	958	980	1270	1170	1240	1270	1150	1220
29	---	---	---	981	951	964	1330	1230	1250	1260	1180	1230
30	---	---	---	1000	966	986	1330	1080	1180	1210	1170	1200
31	---	---	---	1010	983	997	---	---	---	1210	1170	1190
MONTH	1210	622	1050	1080	800	986	1330	843	1020	1270	840	1090

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306007 PICEANCE CREEK BELOW RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394934 LONGITUDE 1081057 DRAINAGE AREA 177.00 DATUM 6366.00 STATE 08 COUNTY 103

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	1210	1180	1200	1260	1210	1240	1340	1300	1320	1070	996	1040
2	1210	1160	1190	1300	1220	1260	1370	1270	1320	1070	998	1040
3	1220	1170	1200	1300	1280	1290	1310	1250	1290	1070	1000	1040
4	1260	1200	1230	1290	1240	1270	1290	1260	1270	1070	1010	1050
5	1260	1210	1230	1290	1250	1270	1310	1260	1290	1070	1000	1040
6	1240	1160	1180	1310	1290	1300	1350	1190	1280	1050	870	979
7	1250	1170	1200	1310	1270	1300	1220	1180	1200	1040	1010	1030
8	1250	1200	1230	1300	1240	1270	1200	1160	1180	1040	1010	1030
9	1250	1200	1230	1280	1250	1260	1190	1150	1170	1040	872	999
10	1240	1210	1220	1300	1270	1280	1170	1070	1100	1040	1010	1030
11	1230	1210	1220	1300	1280	1290	1080	882	1010	1030	974	1000
12	1260	1210	1230	1290	1280	1280	---	---	---	1010	994	999
13	1260	1200	1230	1280	1270	1280	---	---	---	1030	1010	1020
14	1240	1180	1210	1280	1260	1270	---	---	---	1010	964	983
15	1240	1210	1230	1270	1240	1260	1100	1080	1090	1020	998	1010
16	1240	1210	1230	1280	1260	1270	1100	1080	1090	1030	1010	1020
17	1320	1200	1230	1290	1260	1280	1090	883	1040	1040	1010	1030
18	1290	1190	1240	1280	1220	1240	1050	916	1000	1040	1020	1030
19	1330	1270	1290	1280	1240	1260	1060	1020	1050	1040	1010	1030
20	1300	1260	1280	1270	1250	1260	1070	1040	1060	1030	996	1020
21	1310	1260	1280	1300	1250	1270	1070	1060	1060	1030	1010	1020
22	1370	1290	1320	1310	1280	1290	1070	1050	1060	1030	1000	1020
23	1340	1260	1300	1330	1280	1300	1040	986	1020	1030	994	1020
24	1310	1270	1290	1330	1240	1300	1070	1030	1060	1030	998	1020
25	1330	1300	1320	1320	1290	1310	1070	1050	1060	1020	1010	1020
26	1340	1300	1320	1350	1300	1330	1070	1050	1060	1020	994	1010
27	1330	1280	1300	1360	1310	1340	1060	1040	1060	1020	986	1000
28	1310	1260	1290	1400	1300	1330	1060	1030	1050	1020	990	1010
29	1290	1250	1270	1350	1330	1340	1060	1010	1040	1010	986	997
30	1280	1230	1260	1350	1310	1330	1050	996	1030	1000	974	990
31	---	---	---	1340	1290	1320	1050	986	1030	---	---	---
MONTH	1370	1160	1250	1400	1210	1290	1370	882	1120	1070	870	1020
YEAR	1400	622	1120									

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306007 PICEANCE CREEK BELOW RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394934 LONGITUDE 1081057 DRAINAGE AREA 177.00 DATUM 6366.00 STATE 08 COUNTY 103

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	15.0	7.0	11.0	8.5	2.5	5.0	.5	.0	.0	4.0	.0	2.0
2	12.0	9.5	10.5	9.5	3.5	6.0	3.5	.0	1.5	.0	.0	.0
3	13.5	10.0	11.0	9.5	3.5	6.5	3.5	.0	1.5	.0	.0	.0
4	11.0	9.0	10.0	10.0	3.5	6.5	4.0	.0	2.0	.0	.0	.0
5	12.0	8.5	10.0	8.5	3.5	6.5	5.0	2.0	3.0	2.0	.0	1.0
6	14.0	7.0	10.5	9.0	4.0	6.5	4.5	.5	2.5	1.0	.0	.5
7	14.0	7.5	11.0	9.0	6.0	7.0	5.0	1.0	3.0	---	---	---
8	10.5	9.5	10.0	8.0	4.0	6.0	5.0	1.0	3.0	.0	.0	.0
9	12.5	8.0	10.0	8.5	3.0	5.5	4.5	.5	2.5	.0	.0	.0
10	13.0	7.5	10.0	8.0	2.5	5.0	5.5	1.5	3.5	.0	.0	.0
11	10.5	8.0	9.5	8.0	2.5	5.0	5.5	2.0	4.0	.5	.0	.0
12	12.0	7.0	9.5	7.5	2.5	5.0	5.0	1.5	3.5	.5	.0	.0
13	12.5	7.0	10.0	8.5	4.0	6.0	4.0	2.5	3.0	.5	.0	.0
14	11.5	8.0	9.5	8.5	5.0	6.5	4.0	1.0	2.5	1.0	.0	.5
15	9.5	7.0	8.5	9.0	5.0	6.5	5.0	2.5	3.5	.5	.0	.0
16	10.0	6.0	8.0	8.5	4.0	6.5	3.0	.0	1.5	3.0	.0	1.5
17	11.5	7.0	9.0	7.5	3.5	5.5	2.0	.0	.5	3.5	.5	2.0
18	12.5	5.5	8.5	5.5	3.5	4.5	.5	.0	.0	4.0	.5	3.0
19	12.0	5.0	8.0	5.0	1.5	3.0	5.0	.5	3.0	3.5	.0	2.0
20	11.5	5.0	8.5	5.0	.5	3.0	5.5	2.5	4.0	3.0	.0	1.5
21	11.5	5.0	8.0	5.5	2.0	4.0	4.0	2.0	3.0	---	---	---
22	10.5	4.5	8.0	7.0	3.5	5.5	2.5	.0	1.5	---	---	---
23	10.0	4.0	7.0	7.5	4.5	6.0	.0	.0	.0	---	---	---
24	7.0	5.5	6.5	7.5	3.5	5.5	.0	.0	.0	---	---	---
25	10.0	5.0	7.5	5.0	1.0	3.0	.5	.0	.0	5.0	1.0	3.0
26	10.0	4.5	7.0	1.5	.0	.5	.5	.0	.0	4.5	.0	2.5
27	10.5	5.5	8.0	3.0	.0	1.5	.5	.0	.0	3.5	.0	1.0
28	9.5	5.5	7.5	3.5	.0	2.0	.0	.0	.0	3.5	.0	2.0
29	9.5	4.5	7.5	3.0	1.0	2.0	.5	.0	.0	.5	.0	.0
30	6.5	3.5	5.0	3.0	.5	2.0	3.0	.0	1.0	2.5	.0	.5
31	7.0	1.5	4.0	---	---	---	2.5	.0	1.5	3.0	.0	1.0
MONTH	15.0	1.5	8.5	10.0	.0	5.0	5.5	.0	2.0	5.0	.0	1.0

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY   PROCESS DATE IS 10-31-83

STATION NUMBER   09306007   PICEANCE CREEK BELOW RIO BLANCO, CO.   STREAM   SOURCE AGENCY USGS
LATITUDE 394934   LONGITUDE 1081057   DRAINAGE AREA   177.00   DATUM 6366.00   STATE 08   COUNTY 103

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.5	.0	.5	7.0	1.5	4.5	11.5	4.0	6.5	15.0	6.5	10.5
2	.5	.0	.0	10.5	4.5	6.5	9.5	1.0	5.0	17.0	6.0	11.0
3	.0	.0	.0	6.0	2.5	3.5	13.5	1.0	7.0	17.5	4.0	11.5
4	.0	.0	.0	7.5	1.0	4.0	12.0	3.0	7.0	11.5	7.5	9.5
5	.0	.0	.0	6.5	1.5	3.0	11.5	.0	5.5	14.0	4.5	8.0
6	.0	.0	.0	7.0	.0	3.0	10.0	3.5	6.5	16.0	2.0	8.5
7	.0	.0	.0	9.5	1.5	4.5	5.0	.5	3.5	13.0	3.0	8.0
8	.0	.0	.0	7.0	1.0	4.0	8.0	.0	3.0	16.0	6.5	10.0
9	.5	.0	.0	8.5	1.0	4.5	12.5	.0	5.0	16.0	5.5	9.0
10	.5	.0	.0	7.5	2.5	5.0	14.5	.5	7.0	14.0	5.0	9.0
11	.5	.0	.0	8.5	3.5	6.0	14.5	4.0	9.0	12.5	5.5	8.5
12	.5	.0	.0	9.5	3.5	6.0	12.0	3.5	8.5	6.5	2.0	4.5
13	5.0	.0	2.5	11.5	.5	5.5	17.0	4.5	10.0	11.5	2.5	6.5
14	6.0	2.0	4.0	8.0	1.5	5.0	16.0	4.0	10.0	14.0	5.5	9.0
15	5.5	2.0	3.5	8.0	3.5	5.5	11.5	4.0	8.0	14.5	4.5	10.0
16	7.5	1.5	4.0	9.0	3.0	5.5	13.0	2.5	7.5	17.5	5.5	11.0
17	6.5	.0	3.0	12.5	2.0	6.5	15.0	1.0	7.5	16.5	6.0	11.0
18	---	---	---	10.5	3.0	6.5	11.0	2.5	7.0	17.0	6.5	11.5
19	---	---	---	6.0	2.0	4.0	10.5	1.0	5.5	13.5	7.0	10.0
20	8.0	.0	3.5	7.5	1.0	3.5	8.0	.0	4.0	18.0	6.5	11.5
21	8.5	.5	4.0	5.5	.0	2.5	14.5	.0	6.0	20.5	5.0	12.0
22	8.0	.0	3.5	8.5	.0	3.5	17.0	1.0	8.5	17.0	6.0	11.5
23	7.5	2.5	4.0	12.0	.0	5.5	12.5	4.0	7.5	20.0	7.0	13.0
24	8.0	.5	4.0	12.5	.5	6.0	18.0	3.5	10.5	18.5	7.0	11.5
25	9.0	1.5	4.5	13.5	1.0	7.0	15.5	4.5	9.5	19.0	5.5	11.5
26	9.0	.0	4.0	7.5	4.5	6.0	15.5	5.0	8.5	22.0	6.5	13.5
27	8.0	2.0	4.5	10.5	4.5	7.0	16.5	5.5	9.5	20.5	8.0	13.0
28	10.5	.5	5.0	12.5	4.0	8.0	21.5	3.5	11.5	15.0	7.5	11.0
29	---	---	---	6.5	3.0	4.5	17.0	6.0	9.5	17.5	6.0	11.5
30	---	---	---	5.5	.5	2.5	17.0	2.5	9.5	13.5	7.5	10.0
31	---	---	---	12.5	.0	5.5	---	---	---	20.5	6.5	12.5
MONTH	10.5	.0	2.0	13.5	.0	5.0	21.5	.0	7.5	22.0	2.0	10.5

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306007 PICEANCE CREEK BELOW RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394934 LONGITUDE 1081057 DRAINAGE AREA 177.00 DATUM 6366.00 STATE 08 COUNTY 103

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.5	7.0	11.5	22.5	8.5	15.0	23.5	10.5	16.5	20.5	10.0	14.5
2	17.0	6.0	11.5	22.5	8.0	14.5	18.0	13.0	15.0	19.5	9.0	14.0
3	19.0	7.5	12.5	23.5	8.0	15.0	21.0	11.5	16.0	19.5	9.0	14.0
4	20.0	6.5	12.0	23.5	9.0	15.0	23.0	11.0	17.0	17.5	10.0	14.0
5	19.5	5.5	11.5	17.5	7.5	12.5	23.5	12.5	18.0	17.5	12.0	14.0
6	19.0	6.0	11.5	22.5	11.0	17.0	23.0	12.0	17.5	17.0	9.5	13.0
7	19.5	6.0	12.0	20.0	8.0	13.5	20.5	12.0	16.5	15.5	10.0	12.5
8	19.0	6.0	10.5	18.5	10.0	13.5	20.0	12.0	16.0	15.5	10.0	12.5
9	21.0	6.0	12.5	19.5	10.0	14.0	21.5	12.5	16.5	14.5	9.5	12.0
10	17.5	6.5	12.5	22.5	9.0	15.0	19.5	10.5	15.5	15.5	10.5	12.5
11	22.5	7.5	14.5	22.0	10.5	15.0	18.0	12.0	14.5	13.0	10.0	11.5
12	18.0	9.0	13.5	22.5	10.5	16.0	---	---	---	14.5	9.0	11.0
13	18.5	9.0	13.5	20.0	11.0	14.5	---	---	---	10.0	8.5	9.5
14	16.0	8.0	12.0	20.0	10.0	15.0	---	---	---	10.5	7.0	8.5
15	17.0	8.0	12.5	21.5	10.0	15.0	21.5	12.0	16.0	16.0	7.5	11.5
16	23.0	8.0	14.5	22.0	9.5	15.5	19.0	12.5	15.5	16.0	8.5	12.0
17	22.0	10.0	15.5	21.5	12.0	16.0	18.5	12.0	15.0	16.0	10.0	12.5
18	17.5	10.0	12.5	21.0	11.5	16.0	20.0	12.0	16.0	14.5	8.5	11.5
19	20.0	7.5	12.5	23.5	11.0	16.5	21.0	12.0	17.0	15.0	8.5	11.5
20	20.5	8.0	14.5	21.5	12.0	16.5	19.5	12.5	16.0	16.0	9.0	12.0
21	16.0	9.0	12.5	22.5	12.0	17.0	20.0	10.5	15.5	17.0	9.0	12.5
22	16.5	9.5	12.0	23.0	13.5	17.5	17.0	13.0	15.0	17.5	8.5	13.0
23	19.5	9.0	14.0	24.0	12.0	17.5	18.5	11.0	15.0	18.0	9.5	13.5
24	20.5	9.0	13.5	23.0	12.5	16.5	21.0	12.5	16.5	16.5	8.0	12.5
25	19.5	9.0	12.5	22.5	11.5	16.5	16.0	12.0	14.0	13.0	9.5	11.0
26	22.0	8.0	14.0	21.0	12.5	16.0	19.0	11.0	14.5	15.0	11.0	12.5
27	24.0	9.0	15.5	20.5	13.0	16.5	17.5	11.0	14.5	12.0	9.0	11.0
28	24.0	9.0	16.0	18.0	12.5	14.5	19.0	10.5	14.5	9.0	7.5	8.5
29	23.5	9.0	15.5	21.0	12.5	15.5	18.5	11.5	15.0	10.0	6.5	8.0
30	23.0	11.0	15.5	23.0	11.0	16.0	20.0	11.0	15.0	11.5	7.5	9.0
31	---	---	---	24.0	10.5	16.5	18.0	10.5	14.0	---	---	---
MONTH	24.0	5.5	13.0	24.0	7.5	15.5	23.5	10.5	15.5	20.5	6.5	12.0
YEAR	24.0	.0	8.0									

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306022 STEWART GULCH AB WEST FORK NR RIO BLANCO, CO STREAM SOURCE AGENCY USGS
LATITUDE 394848 LONGITUDE 1081100 DRAINAGE AREA 44.00 DATUM 6430.00 STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1			.94			.90			1.2			1.3
2			.94			.96			1.2			1.3
3			1.0			.97			1.2			1.3
4			1.0			1.0			1.1			1.3
5			1.0			1.0			1.1			1.3
6			.95			1.0			1.1			1.3
7			.95			1.1			1.1			1.3
8			1.0			1.1			1.1			1.3
9			1.0			1.1			1.1			1.3
10			.95			1.1			1.1			1.3
11			1.0			1.1			1.1			1.3
12			1.0			1.0			1.1			1.3
13			1.0			1.0			1.1			1.3
14			.95			1.0			1.1			1.3
15			.95			1.0			1.2			1.3
16			.95			1.0			1.2			1.3
17			.95			1.0			1.2			1.4
18			.89			1.1			1.2			1.4
19			.89			1.1			1.2			1.4
20			.89			1.1			1.2			1.4
21			.89			1.1			1.2			1.4
22			.89			1.1			1.2			1.4
23			.89			1.1			1.3			1.4
24			.89			1.1			1.3			1.4
25			.89			1.1			1.3			1.4
26			.89			1.1			1.3			1.5
27			.89			1.2			1.3			1.4
28			.96			1.2			1.3			1.5
29			.96			1.2			1.3			1.4
30			.96			1.2			1.3			1.5
31			.96						1.3			1.5
MONTH			.94			1.1			1.2			1.4

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306022 STEWART GULCH AB WEST FORK NR RIO BLANCO, CO STREAM SOURCE AGENCY USGS
LATITUDE 394848 LONGITUDE 1081100 DRAINAGE AREA 44.00 DATUM 6430.00 STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1			1.5			1.7			1.7			1.8
2			1.5			1.7			1.7			1.8
3			1.5			1.7			1.7			1.8
4			1.4			1.6			1.7			1.8
5			1.4			1.6			1.7			1.6
6			1.4			1.6			1.8			1.6
7			1.4			1.5			1.7			1.6
8			1.4			1.5			1.7			1.6
9			1.4			1.5			1.6			1.5
10			1.4			1.6			1.6			1.5
11			1.4			1.6			1.6			1.4
12			1.4			1.6			1.6			1.4
13			1.4			1.6			1.6			1.5
14			1.6			1.7			1.6			1.5
15			1.7			1.7			1.7			1.5
16			1.8			1.7			1.6			1.5
17			1.9			1.7			1.6			1.6
18			1.8			1.7			1.6			1.5
19			1.8			1.6			1.6			1.6
20			2.0			1.6			1.7			1.5
21			2.2			1.6			1.8			1.5
22			2.8			1.6			1.8			1.5
23			2.1			1.6			1.8			1.5
24			1.8			1.6			1.8			1.5
25			1.8			1.6			1.8			1.5
26			1.8			1.6			1.8			1.5
27			1.8			1.6			1.8			1.5
28			1.8			1.6			1.8			1.5
29						1.7			1.8			1.6
30						1.7			1.8			1.6
31						1.7						1.6
MONTH			1.7			1.6			1.7			1.6

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                         UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY          PROCESS DATE IS 10-31-83

STATION NUMBER   09306022       STEWART GULCH AB WEST FORK NR RIO BLANCO, CO        STREAM    SOURCE AGENCY USGS
LATITUDE  394848      LONGITUDE  1081100         DRAINAGE AREA       44.00   DATUM  6430.00   STATE 08  COUNTY 103

                   DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY       MAX     MIN    MEAN        MAX     MIN    MEAN        MAX     MIN    MEAN        MAX     MIN    MEAN

                  JUNE                       JULY                      AUGUST                    SEPTEMBER

  1                       1.5                        1.4                        1.2                        1.1
  2                       1.5                        1.4                        1.2                        1.1
  3                       1.5                        1.3                        1.2                        1.1
  4                       1.5                        1.3                        1.2                        1.1
  5                       1.5                        1.3                        1.2                        1.2

  6                       1.5                        1.3                        1.2                        1.2
  7                       1.5                        1.3                        1.2                        1.2
  8                       1.5                        1.3                        1.3                        1.2
  9                       1.7                        1.3                        1.3                        1.2
 10                       1.5                        1.3                        1.3                        1.2

 11                       1.5                        1.3                        1.2                        1.2
 12                       1.5                        1.3                        1.3                        1.3
 13                       1.5                        1.3                        1.2                        1.3
 14                       1.5                        1.3                        1.2                        1.2
 15                       1.5                        1.3                        1.2                        1.1

 16                       1.5                        1.3                        1.2                        1.0
 17                       1.5                        1.3                        1.2                        1.0
 18                       1.5                        1.3                        1.3                        1.0
 19                       1.5                        1.3                        1.1                        1.0
 20                       1.5                        1.3                        1.1                        1.0

 21                       1.6                        1.3                        1.2                        .94
 22                       1.4                        1.2                        1.2                        .94
 23                       1.3                        1.2                        1.2                        .94
 24                       1.3                        1.2                        1.2                        .88
 25                       1.3                        1.2                        1.2                        .74

 26                       1.3                        1.2                        1.2                        .53
 27                       1.3                        1.2                        1.2                        .59
 28                       1.3                        1.2                        1.2                        .66
 29                       1.3                        1.2                        1.2                        .74
 30                       1.3                        1.2                        1.2                        .74
 31                                                  1.2                        1.2

MONTH                     1.5                        1.3                        1.2                        1.0

YEAR      ---     ---    1.3
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UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306022 STEWART GULCH AB WEST FORK NR RIO BLANCO, CO STREAM SOURCE AGENCY USGS
LATITUDE 394848 LONGITUDE 1081100 DRAINAGE AREA 44.00 DATUM 6430.00 STATE 08 COUNTY 103

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1			.00			.08			.04			.00
2			.08			.08			.03			.01
3			.06			.07			.02			.00
4			.04			.04			.02			.01
5			.04			.05			.02			.00
6			.03			.06			.03			.02
7			.03			.07			.03			.06
8			.03			.07			.04			.06
9			.03			.06			.04			.06
10			.03			.05			.03			.07
11			.04			.05			.04			.07
12			.06			.06			.04			.08
13			.07			.05			.02			.07
14			.05			.06			---			.04
15			.02			.06			.01			.03
16			.03			.06			.03			.03
17			.03			.05			---			.03
18			.03			.07			---			.05
19			.03			.08			---			.03
20			.04			.09			---			.04
21			.04			.06			---			.04
22			.04			.03			.00			.05
23			.03			.04			---			.05
24			.03			.04			.01			.05
25			.02			.09			.02			.07
26			.04			.08			.04			.07
27			.07			.06			.02			.11
28			.09			.06			.01			.07
29			.10			.05			.01			.08
30			.11			.05			.01			.09
31			.10						.01			.08
MONTH			.05			.06			.02			.05

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306022 STEWART GULCH AB WEST FORK NR RIO BLANCO, CO STREAM SOURCE AGENCY USGS
LATITUDE 394848 LONGITUDE 1081100 DRAINAGE AREA 44.00 DATUM 6430.00 STATE 08 COUNTY 103

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1			.07			.13			.10			.05
2			.07			.12			.09			.05
3			.06			.15			.08			.05
4			.09			.22			.07			.05
5			.09			.15			.06			.04
6			.09			.10			.08			.06
7			.10			.08			.05			.08
8			.10			.06			.05			.10
9			.10			.06			.05			.09
10			.10			.08			.05			.07
11			.10			.09			.05			.05
12			.10			.10			.05			.03
13			.10			.23			.05			.04
14			.15			.15			.05			.05
15			.15			.15			.05			.06
16			.20			.19			.05			.06
17			.25			.20			.05			.10
18			.31			.20			.05			.15
19			.62			.26			.05			.21
20			.69			.25			.05			.20
21			.81			.25			.05			.15
22			1.6			.25			.05			.14
23			.90			.15			.05			.10
24			.39			.09			.05			.10
25			.35			.04			.05			.10
26			.31			.05			.05			.09
27			.18			.06			.05			.09
28			.10			.10			.05			.09
29						.09			.05			.09
30						.10			.05			.09
31						.17						.08
MONTH			.29			.14			.06			.09

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306022 STEWART GULCH AB WEST FORK NR RIO BLANCO, CO STREAM SOURCE AGENCY USGS
LATITUDE 394848 LONGITUDE 1081100 DRAINAGE AREA 44.00 DATUM 6430.00 STATE 08 COUNTY 103

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1			.06			.01			.10			.07
2			.04			.01			.10			.09
3			.03			.01			.10			.11
4			.05			.00			.10			.15
5			.09			.03			.15			.15
6			.14			.08			.15			.16
7			.15			.10			.15			.15
8			.15			.12			.10			.10
9			.17			.14			.10			.07
10			.15			.16			.08			.05
11			.15			.18			.07			.06
12			.15			.20			.06			.07
13			.10			.21			.06			.08
14			.10			.20			.06			.08
15			.09			.20			.07			.05
16			.09			.20			.07			.04
17			.08			.15			.07			.04
18			.07			.16			.10			.05
19			.07			.15			.07			.03
20			.07			.15			.09			.03
21			.06			.10			.12			.03
22			.06			.10			.10			.02
23			.05			.09			.12			.03
24			.04			.09			.10			.04
25			.04			.09			.15			.07
26			.04			.10			.15			.04
27			.03			.10			.14			.04
28			.02			.11			.10			.04
29			.01			.10			.08			.04
30			.00			.10			.06			.03
31						.10			.05			
MONTH			.08			.11			.10			.07
YEAR	---	---	.09									

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306022 STEWART GULCH AB WEST FORK NR RIO BLANCO, CO STREAM SOURCE AGENCY USGS
LATITUDE 394848 LONGITUDE 1081100 DRAINAGE AREA 44.00 DATUM 6430.00 STATE 08 COUNTY 103

SEDIMENT, SUSPENDED CONCENTRATION (MG/L), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1			2			32			11			0
2			32			32			---			---
3			---			---			6			2
4			15			16			---			---
5			---			---			6			0
6			12			---			---			---
7			---			---			11			18
8			11			25			---			16
9			---			---			---			---
10			---			16			---			19
11			13			---			---			---
12			---			---			---			23
13			27			20			---			---
14			---			23			---			12
15			9			---			---			---
16			---			---			10			8
17			10			19			---			---
18			---			---			---			13
19			11			---			---			---
20			---			29			---			10
21			18			---			---			---
22			---			11			1			---
23			14			---			---			13
24			---			12			3			---
25			8			31			---			18
26			---			---			10			---
27			---			20			---			30
28			---			---			3			---
29			38			14			---			---
30			42			---			4			22
31			---						---			---
MONTH			17			21			7			14

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306022 STEWART GULCH AB WEST FORK NR RIO BLANCO, CO STREAM SOURCE AGENCY USGS
LATITUDE 394848 LONGITUDE 1081100 DRAINAGE AREA 44.00 DATUM 6430.00 STATE 08 COUNTY 103

SEDIMENT, SUSPENDED CONCENTRATION (MG/L), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1			18			28			---			---
2			---			27			---			---
3			16			---			---			---
4			---			52			---			---
5			---			---			---			9
6			---			---			16			---
7			---			19			---			---
8			---			---			---			23
9			---			---			---			---
10			---			18			---			---
11			---			---			---			---
12			---			---			---			9
13			---			54			---			---
14			---			---			---			---
15			---			---			---			---
16			---			42			---			15
17			---			---			---			---
18			64			---			---			---
19			128			61			---			48
20			128			---			---			---
21			134			---			---			---
22			134			59			---			34
23			135			---			---			---
24			80			---			---			---
25			72			10			---			---
26			64			---			---			23
27			38			---			---			---
28			20			23			---			---
29						---			---			---
30						---			---			20
31						36						---
MONTH			79			36			16			23

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306022 STEWART GULCH AB WEST FORK NR RIO BLANCO, CO STREAM SOURCE AGENCY USGS
LATITUDE 394848 LONGITUDE 1081100 DRAINAGE AREA 44.00 DATUM 6430.00 STATE 08 COUNTY 103

SEDIMENT, SUSPENDED CONCENTRATION (MG/L), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1			---			---			---			---
2			---			---			32			---
3			7			---			---			38
4			---			2			---			---
5			---			---			---			---
6			34			22			---			50
7			---			---			47			---
8			---			34			---			---
9			38			---			---			---
10			---			---			---			16
11			37			---			---			---
12			---			---			16			---
13			---			60			---			---
14			---			---			---			25
15			23			---			---			18
16			---			---			---			16
17			---			---			21			---
18			---			46			29			17
19			18			---			23			---
20			---			---			---			---
21			---			---			37			12
22			15			---			---			---
23			---			29			36			---
24			---			---			---			17
25			---			---			---			60
26			11			---			---			---
27			---			---			43			---
28			---			34			---			24
29			---			---			---			---
30			1			---			---			---
31						---			16			
MONTH			20			32			30			27
YEAR	---	---	28									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306022 STEWART GULCH AB WEST FORK NR RIO BLANCO, CO STREAM SOURCE AGENCY USGS
LATITUDE 394848 LONGITUDE 1081100 DRAINAGE AREA 44.00 DATUM 6430.00 STATE 08 COUNTY 103

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	11.3	8.7	9.7	10.7	8.9	9.6	12.2	9.2	10.2	11.6	8.6	9.5
2	10.9	8.4	9.1	10.7	8.7	9.4	11.9	9.1	10.0	11.7	8.8	9.8
3	11.2	8.2	9.1	10.7	8.6	9.4	10.6	9.1	9.8	11.7	9.0	9.8
4	10.0	8.6	9.0	10.7	8.6	9.4	12.0	8.8	9.9	11.8	8.8	9.8
5	10.9	8.6	9.4	10.8	8.5	9.5	11.5	8.9	9.6	11.8	8.6	9.5
6	10.8	8.7	9.5	10.8	8.4	9.4	11.4	8.8	9.7	12.0	8.6	9.9
7	10.7	8.5	9.5	10.6	8.5	9.3	11.4	8.8	9.6	11.8	9.4	10.2
8	10.4	8.5	9.0	11.2	8.8	9.6	11.4	8.8	9.7	12.0	9.6	10.1
9	10.9	8.7	9.5	11.2	8.8	9.7	11.3	8.8	9.7	12.4	9.4	10.4
10	10.9	8.5	9.5	11.4	8.8	9.8	11.2	8.8	9.4	12.3	9.2	10.2
11	10.6	8.6	9.2	11.4	8.8	9.8	11.1	8.4	9.3	12.2	9.0	10.1
12	11.0	8.6	9.4	11.7	8.8	9.7	11.4	8.5	9.5	12.5	9.2	10.2
13	11.0	8.5	9.4	12.1	8.6	9.6	10.8	8.6	9.3	12.5	9.1	10.1
14	11.0	8.7	9.5	11.6	8.5	9.5	11.0	8.7	9.3	12.4	9.3	10.3
15	11.0	8.6	9.3	11.8	8.5	9.5	11.0	8.5	9.1	12.6	9.2	10.3
16	11.0	8.7	9.6	11.5	8.7	9.6	11.1	8.9	9.7	12.6	9.1	10.1
17	10.8	8.9	9.5	11.7	8.8	9.8	11.5	9.3	10.0	12.6	9.0	10.0
18	11.0	9.0	9.6	12.2	8.9	9.8	11.6	9.0	10.0	12.8	8.8	10.0
19	10.9	8.9	9.6	12.2	9.1	10.2	11.5	8.7	9.6	12.5	8.7	10.0
20	10.9	8.8	9.6	12.3	8.8	10.0	11.3	8.7	9.4	13.3	9.0	10.3
21	10.9	8.9	9.7	12.2	8.8	9.9	10.9	8.7	9.3	12.2	8.8	10.0
22	11.1	9.0	9.8	12.0	8.6	9.7	11.6	9.0	9.8	12.8	9.1	10.3
23	11.0	8.8	9.7	12.4	8.6	9.6	11.9	9.6	10.3	12.8	9.2	10.4
24	10.3	8.7	9.3	12.0	8.6	9.7	11.8	9.2	10.2	13.1	8.9	10.3
25	10.9	8.9	9.6	10.8	8.8	9.5	11.4	9.1	9.8	12.8	8.8	10.2
26	10.9	8.8	9.6	12.0	9.3	10.1	11.7	8.9	9.9	12.4	8.2	9.8
27	10.9	8.8	9.6	12.2	8.9	10.0	11.4	8.9	9.8	12.5	8.6	10.0
28	10.8	8.7	9.5	12.2	9.0	10.1	11.6	9.2	10.1	13.3	8.2	10.1
29	10.7	8.6	9.2	11.7	8.8	9.7	11.8	8.7	9.8	12.8	8.7	10.0
30	11.2	8.7	9.6	12.0	9.0	10.0	11.8	8.6	9.5	12.9	9.2	10.3
31	11.0	8.8	9.8	---	---	---	11.8	8.7	9.7	12.2	9.0	10.1
MONTH	11.3	8.2	9.5	12.4	8.4	9.7	12.2	8.4	9.7	13.3	8.2	10.1

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306022 STEWART GULCH AB WEST FORK NR RIO BLANCO, CO STREAM SOURCE AGENCY USGS
LATITUDE 394848 LONGITUDE 1081100 DRAINAGE AREA 44.00 DATUM 6430.00 STATE 08 COUNTY 103

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.4	9.0	10.1	11.1	8.4	9.3						
2	12.3	9.1	10.2	10.7	8.6	9.4						
3	12.1	9.2	10.1	---	---	---						
4	12.2	9.5	10.4	---	---	---						
5	12.2	9.6	10.5	---	---	---						
6	12.3	9.6	10.6	---	---	---						
7	12.1	9.2	10.3	---	---	---						
8	11.8	9.1	10.0	---	---	---						
9	11.9	9.0	10.1	---	---	---						
10	11.6	9.0	9.9	---	---	---						
11	12.0	9.1	10.0	---	---	---						
12	12.0	9.0	10.2	---	---	---						
13	11.9	8.4	9.8	---	---	---						
14	12.0	7.4	9.4	---	---	---						
15	12.1	7.4	9.2	---	---	---						
16	11.4	7.7	9.2	---	---	---						
17	12.0	7.3	9.3	---	---	---						
18	11.7	8.0	9.5	---	---	---						
19	11.7	8.0	9.6	---	---	---						
20	11.7	8.3	9.6	---	---	---						
21	11.5	8.4	9.5	---	---	---						
22	11.3	8.4	9.4	---	---	---						
23	11.1	8.4	9.3	---	---	---						
24	10.9	8.4	9.5	---	---	---						
25	10.8	8.5	9.4	---	---	---						
26	10.7	8.5	9.5	---	---	---						
27	10.7	8.5	9.4	---	---	---						
28	10.8	8.5	9.4	---	---	---						
29	---	---	---	---	---	---						
30	---	---	---	---	---	---						
31	---	---	---	---	---	---						
MONTH	12.4	7.3	9.8	11.1	8.4	9.4						

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                         UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY             PROCESS DATE IS 10-31-83

                              STEWART GULCH AB WEST FORK NR RIO BLANCO, CO          STREAM    SOURCE AGENCY USGS
STATION NUMBER   09306022                                                                     STATE 08  COUNTY 103
LATITUDE  394848     LONGITUDE  1081100         DRAINAGE AREA       44.00   DATUM  6430.00

                       OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY       MAX     MIN    MEAN         MAX     MIN    MEAN          MAX     MIN    MEAN          MAX     MIN    MEAN

                  JUNE                        JULY                         AUGUST                       SEPTEMBER

  1
  2
  3
  4
  5

  6
  7
  8
  9
 10

 11
 12
 13
 14
 15

 16
 17
 18
 19
 20

 21
 22
 23
 24
 25

 26
 27
 28
 29
 30
 31

MONTH

YEAR     13.3     7.3     9.7

NOTE:   NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR
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UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306022 STEWART GULCH AB WEST FORK NR RIO BLANCO, CO STREAM SOURCE AGENCY USGS
LATITUDE 394848 LONGITUDE 1081100 DRAINAGE AREA 44.00 DATUM 6430.00 STATE 08 COUNTY 103

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.3	8.1	8.2	8.3	8.1	8.2	8.4	8.1	8.2	8.4	8.1	8.2
2	8.3	8.0	8.2	8.3	8.1	8.2	8.4	8.1	8.2	8.4	8.1	8.2
3	8.3	8.0	8.2	8.3	8.1	8.2	8.4	8.1	8.2	8.4	8.1	8.2
4	8.2	8.1	8.1	8.3	8.1	8.2	8.4	8.1	8.2	8.4	8.1	8.2
5	8.3	8.1	8.2	8.3	8.1	8.2	8.4	8.1	8.2	8.4	8.1	8.2
6	8.3	8.2	8.2	8.3	8.1	8.2	8.4	8.1	8.2	8.4	8.1	8.2
7	8.3	8.1	8.2	8.3	8.1	8.2	8.4	8.1	8.2	8.3	8.1	8.2
8	8.2	8.1	8.1	8.3	8.1	8.2	8.3	8.1	8.2	8.4	8.1	8.2
9	8.3	8.1	8.2	8.3	8.1	8.2	8.4	8.1	8.2	8.4	8.1	8.2
10	8.3	8.1	8.2	8.4	8.1	8.2	8.3	8.1	8.2	8.4	8.1	8.2
11	8.3	8.1	8.2	8.3	8.1	8.2	8.4	8.1	8.2	8.4	8.1	8.2
12	8.3	8.1	8.2	8.4	8.1	8.2	8.4	8.1	8.2	8.4	8.1	8.2
13	8.3	8.1	8.2	8.4	8.1	8.2	8.3	8.1	8.2	8.4	8.1	8.2
14	8.3	8.1	8.2	8.4	8.1	8.2	8.3	8.1	8.2	8.4	8.1	8.2
15	8.3	8.1	8.1	8.4	8.1	8.2	8.3	8.1	8.2	8.4	8.1	8.2
16	8.3	8.1	8.2	8.4	8.1	8.2	8.4	8.1	8.2	8.4	8.1	8.2
17	8.3	8.1	8.2	8.4	8.1	8.2	8.3	8.1	8.2	8.4	8.1	8.2
18	8.3	8.1	8.2	8.4	8.1	8.2	8.3	8.1	8.2	8.4	8.1	8.2
19	8.3	8.1	8.2	8.4	8.2	8.2	8.4	8.1	8.2	8.4	8.1	8.2
20	8.3	8.2	8.2	8.4	8.1	8.2	8.4	8.1	8.2	8.4	8.1	8.2
21	8.3	8.1	8.2	8.4	8.1	8.2	8.3	8.1	8.2	8.4	8.1	8.2
22	8.3	8.1	8.2	8.4	8.1	8.2	8.3	8.1	8.2	8.4	8.1	8.2
23	8.3	8.1	8.2	8.4	8.1	8.2	8.4	8.1	8.2	8.4	8.1	8.2
24	8.2	8.1	8.1	8.4	8.1	8.2	8.4	8.1	8.2	8.4	8.1	8.2
25	8.3	8.1	8.2	8.3	8.1	8.2	8.4	8.1	8.2	8.4	8.1	8.2
26	8.3	8.1	8.2	8.4	8.1	8.2	8.4	8.1	8.2	8.4	8.0	8.2
27	8.3	8.1	8.2	8.4	8.1	8.2	8.4	8.1	8.2	8.4	8.1	8.2
28	8.3	8.1	8.2	8.4	8.1	8.2	8.4	8.1	8.2	8.4	8.0	8.2
29	8.2	8.1	8.1	8.4	8.1	8.2	8.4	8.1	8.2	8.4	8.0	8.2
30	8.3	8.1	8.1	8.4	8.1	8.2	8.4	8.1	8.2	8.4	8.1	8.2
31	8.2	8.1	8.1	---	---	---	8.4	8.1	8.2	8.4	8.1	8.2
MONTH	8.3	8.0	8.2	8.4	8.1	8.2	8.4	8.1	8.2	8.4	8.0	8.2

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306022 STEWART GULCH AB WEST FORK NR RIO BLANCO, CO STREAM SOURCE AGENCY USGS
LATITUDE 394848 LONGITUDE 1081100 DRAINAGE AREA 44.00 DATUM 6430.00 STATE 08 COUNTY 103

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	8.4	8.1	8.2	8.3	8.1	8.1						
2	8.4	8.1	8.2	8.3	8.0	8.2						
3	8.3	8.1	8.2	---	---	---						
4	8.3	8.1	8.1	---	---	---						
5	8.3	8.1	8.2	---	---	---						
6	8.3	8.1	8.2	---	---	---						
7	8.3	8.1	8.2	---	---	---						
8	8.4	8.1	8.2	---	---	---						
9	8.4	8.1	8.2	---	---	---						
10	8.3	8.1	8.2	---	---	---						
11	8.4	8.1	8.2	---	---	---						
12	8.3	8.1	8.2	---	---	---						
13	8.4	8.0	8.2	---	---	---						
14	8.4	7.9	8.1	---	---	---						
15	8.3	7.9	8.1	---	---	---						
16	8.3	7.9	8.1	---	---	---						
17	8.3	7.9	8.1	---	---	---						
18	8.3	7.9	8.1	---	---	---						
19	8.3	7.9	8.1	---	---	---						
20	8.3	7.9	8.1	---	---	---						
21	8.3	7.9	8.1	---	---	---						
22	8.3	7.9	8.1	---	---	---						
23	8.3	8.0	8.1	---	---	---						
24	8.3	8.0	8.1	---	---	---						
25	8.3	8.1	8.1	---	---	---						
26	8.3	8.1	8.1	---	---	---						
27	8.3	8.0	8.1	---	---	---						
28	8.3	8.1	8.1	---	---	---						
29	---	---	---	---	---	---						
30	---	---	---	---	---	---						
31	---	---	---	---	---	---						
MONTH	8.4	7.9	8.1	8.3	8.0	8.2						

```
                          UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY          PROCESS DATE IS 10-31-83

STATION NUMBER   09306022        STEWART GULCH AB WEST FORK NR RIO BLANCO, CO        STREAM    SOURCE AGENCY USGS
LATITUDE  394848      LONGITUDE  1081100         DRAINAGE AREA        44.00   DATUM  6430.00   STATE 08  COUNTY 103

                          PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY       MAX     MIN    MEAN         MAX     MIN    MEAN         MAX     MIN    MEAN         MAX     MIN    MEAN

                  JUNE                        JULY                        AUGUST                      SEPTEMBER

  1
  2
  3
  4
  5

  6
  7
  8
  9
 10

 11
 12
 13
 14
 15

 16
 17
 18
 19
 20

 21
 22
 23
 24
 25

 26
 27
 28
 29
 30
 31

MONTH

YEAR      8.4     7.9    8.2

NOTE:    NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR
```

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306022 STEWART GULCH AB WEST FORK NR RIO BLANCO, CO STREAM SOURCE AGENCY USGS
LATITUDE 394848 LONGITUDE 1081100 DRAINAGE AREA 44.00 DATUM 6430.00 STATE 08 COUNTY 103

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	1330	1320	1330	1320	1310	1320	1330	1310	1320	1320	1280	1310
2	1330	1290	1320	1320	1310	1320	1320	1300	1310	1330	1300	1320
3	1340	1290	1320	1320	1310	1320	1320	1300	1310	1330	1310	1320
4	1330	1280	1320	1320	1310	1320	1320	1300	1310	1330	1310	1320
5	1330	1290	1320	1320	1310	1320	1320	1300	1310	1320	1300	1320
6	1330	1320	1330	1320	1310	1320	1320	1300	1310	1330	1310	1320
7	1330	1320	1330	1320	1310	1320	1320	1300	1310	1340	1300	1330
8	1330	1300	1310	1320	1310	1320	1320	1300	1310	1320	1300	1310
9	1330	1320	1330	1320	1310	1320	1320	1300	1320	1330	1310	1320
10	1330	1320	1330	1330	1310	1320	1320	1300	1320	1320	1300	1320
11	1330	1270	1320	1330	1310	1320	1320	1310	1320	1320	1310	1320
12	1330	1280	1320	1330	1310	1320	1320	1310	1320	1330	1310	1320
13	1330	1290	1320	1320	1300	1320	1320	1310	1320	1330	1310	1320
14	1330	1320	1320	1320	1310	1320	1320	1310	1320	1330	1310	1320
15	1330	1250	1310	1320	1310	1320	1320	1290	1320	1330	1310	1320
16	1330	1270	1320	1330	1310	1320	1320	1300	1310	1330	1310	1330
17	1330	1320	1320	1330	1310	1320	1320	1300	1320	1330	1320	1330
18	1320	1310	1320	1320	1290	1310	1330	1310	1320	1330	1310	1330
19	1320	1290	1320	1330	1310	1320	1320	1310	1320	1330	1320	1330
20	1320	1310	1320	1330	1310	1320	1320	1300	1320	1330	1310	1330
21	1320	1310	1320	1330	1310	1320	1320	1290	1310	1330	1300	1330
22	1320	1310	1320	1330	1310	1320	1320	1310	1320	1330	1300	1320
23	1330	1310	1320	1330	1310	1320	1330	1310	1320	1330	1310	1330
24	1320	1310	1320	1330	1310	1330	1330	1310	1320	1330	1310	1320
25	1330	1310	1320	1330	1290	1320	1320	1310	1320	1330	1310	1320
26	1330	1310	1320	1330	1310	1330	1330	1310	1320	1330	1270	1310
27	1320	1310	1320	1330	1310	1320	1330	1280	1310	1330	1310	1320
28	1320	1310	1320	1330	1310	1320	1330	1310	1320	1330	1290	1320
29	1320	1300	1310	1320	1300	1310	1320	1310	1320	1330	1310	1320
30	1320	1290	1310	1320	1300	1320	1320	1270	1310	1340	1310	1330
31	1330	1310	1320	---	---	---	1320	1310	1320	1330	1290	1320
MONTH	1340	1250	1320	1330	1290	1320	1330	1270	1320	1340	1270	1320

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306022 STEWART GULCH AB WEST FORK NR RIO BLANCO, CO STREAM SOURCE AGENCY USGS
LATITUDE 394848 LONGITUDE 1081100 DRAINAGE AREA 44.00 DATUM 6430.00 STATE 08 COUNTY 103

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1330	1310	1320	1320	1270	1300	---	---	---	---	---	---
2	1340	1310	1320	1340	1260	1320	---	---	---	---	---	---
3	1330	1310	1320	1330	1310	1320	---	---	---	---	---	---
4	1330	1310	1330	1320	1290	1300	---	---	---	---	---	---
5	1340	1300	1320	1310	1280	1290	---	---	---	1300	1290	1300
6	1330	1300	1320	1310	1260	1280	1320	1310	1320	1310	1300	1300
7	1330	1310	1320	---	---	---	1320	1270	1300	1320	1310	1310
8	1330	1310	1320	---	---	---	1310	1250	1290	1320	1300	1310
9	1330	1310	1320	---	---	---	1320	1300	1310	1330	1300	1320
10	1330	1310	1320	---	---	---	---	---	---	1330	1320	1320
11	1330	1310	1320	---	---	---	---	---	---	1330	1300	1320
12	1330	1310	1320	---	---	---	---	---	---	1310	1220	1260
13	1320	1310	1320	---	---	---	---	---	---	1310	1250	1280
14	1340	1300	1320	---	---	---	---	---	---	1320	1280	1300
15	1320	1260	1300	---	---	---	---	---	---	1340	1290	1320
16	1320	1220	1290	---	---	---	---	---	---	1320	1300	1310
17	1310	1140	1270	---	---	---	---	---	---	1310	1270	1300
18	1320	1140	1270	---	---	---	---	---	---	1330	1300	1310
19	1320	1010	1240	---	---	---	---	---	---	1320	1310	1320
20	1310	861	1190	---	---	---	---	---	---	1350	1320	1330
21	1310	753	1160	---	---	---	---	---	---	1340	1330	1340
22	1310	583	1140	---	---	---	---	---	---	1360	1310	1340
23	1310	705	1170	---	---	---	---	---	---	---	---	---
24	1320	1110	1280	---	---	---	---	---	---	---	---	---
25	1320	1110	1280	---	---	---	---	---	---	---	---	---
26	1320	1130	1280	---	---	---	---	---	---	---	---	---
27	1320	1240	1300	---	---	---	---	---	---	1350	1300	1320
28	1320	1220	1300	---	---	---	---	---	---	1350	1320	1340
29	---	---	---	---	---	---	---	---	---	1350	1330	1340
30	---	---	---	---	---	---	---	---	---	1340	1250	1300
31	---	---	---	---	---	---	---	---	---	1320	1260	1290
MONTH	1340	583	1280	1340	1260	1300	1320	1250	1310	1360	1220	1310

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306022 STEWART GULCH AB WEST FORK NR RIO BLANCO, CO STREAM SOURCE AGENCY USGS
LATITUDE 394848 LONGITUDE 1081100 DRAINAGE AREA 44.00 DATUM 6430.00 STATE 08 COUNTY 103

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	1320	1270	1300	1320	1290	1310	1340	1320	1330	1340	1320	1340
2	1320	1290	1310	1330	1300	1320	1320	1250	1300	1340	1320	1330
3	1320	1280	1300	1330	1310	1320	1330	1280	1320	1340	1320	1330
4	1310	1290	1300	1330	1310	1320	1330	1310	1320	1340	1320	1330
5	1300	1280	1300	1320	1300	1310	1330	1310	1320	1340	1290	1330
6	1310	1290	1300	1320	1290	1310	1330	1310	1320	1340	1320	1330
7	1360	1290	1310	1320	1300	1310	1330	1310	1320	1330	1320	1330
8	1360	1310	1340	1320	1290	1310	1330	1310	1320	1330	1310	1330
9	1330	1310	1310	1320	1300	1310	1330	1310	1320	1330	1310	1320
10	1320	1300	1310	1330	1300	1310	1330	1310	1320	1330	1310	1330
11	1320	1300	1310	1320	1310	1310	1330	1300	1320	1330	1250	1300
12	1320	1300	1310	1320	1310	1320	1320	1170	1290	1330	1300	1320
13	1320	1310	1320	1320	1310	1320	1330	1260	1310	1320	1280	1310
14	1320	1300	1310	1330	1310	1320	1330	1300	1320	1330	1300	1320
15	1320	1300	1310	1330	1310	1320	1330	1310	1320	1340	1310	1320
16	1320	1300	1310	1330	1310	1320	1330	1310	1320	1340	1320	1330
17	1320	1310	1310	1330	1310	1320	1330	1290	1320	1340	1320	1330
18	1320	1300	1310	1330	1310	1320	1340	810	1250	1330	1310	1330
19	1320	1310	1310	1330	1310	1320	1330	1300	1330	1330	1310	1320
20	1320	1310	1320	1330	1310	1320	1350	1280	1320	1350	1310	1320
21	1320	1300	1310	1330	1310	1320	1330	1310	1320	1360	1310	1320
22	1320	1300	1310	1340	1310	1320	1350	1320	1320	1330	1310	1320
23	1320	1300	1310	1330	1310	1320	1330	1320	1330	1360	1310	1320
24	1320	1300	1310	1340	1250	1310	1340	1320	1330	1330	1310	1320
25	1320	1300	1310	1360	1220	1320	1330	1300	1320	1330	1320	1320
26	1320	1300	1310	1330	1310	1320	1340	1310	1330	1330	1310	1320
27	1330	1300	1310	1330	1300	1320	1340	1320	1330	1330	1250	1300
28	1320	1300	1310	1330	1270	1310	1340	1320	1330	1320	1290	1310
29	1320	1300	1310	1330	1310	1320	1340	1320	1330	1330	1280	1310
30	1320	1300	1310	1330	1310	1320	1340	1320	1330	1330	1280	1310
31	---	---	---	1340	1310	1320	1340	1310	1330	---	---	---
MONTH	1360	1270	1310	1360	1220	1320	1350	810	1320	1360	1250	1320
YEAR	1360	583	1310									

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306022 STEWART GULCH AB WEST FORK NR RIO BLANCO, CO STREAM SOURCE AGENCY USGS
LATITUDE 394848 LONGITUDE 1081100 DRAINAGE AREA 44.00 DATUM 6430.00 STATE 08 COUNTY 103

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	12.5	6.0	8.5	10.5	4.0	6.0	5.5	2.0	4.0	8.0	3.5	5.5
2	10.5	7.5	8.5	10.5	4.5	6.5	7.5	3.5	5.0	6.0	2.0	4.0
3	11.5	8.5	9.0	11.0	4.5	6.5	8.5	3.5	5.0	6.0	3.0	4.0
4	9.5	8.0	8.5	11.0	4.5	6.5	8.0	3.5	5.5	5.5	2.0	4.0
5	11.5	7.5	9.0	10.5	4.5	7.0	9.0	4.5	6.0	7.5	4.5	5.5
6	12.0	6.5	8.5	10.0	5.0	7.0	9.0	4.0	5.5	5.0	1.0	3.5
7	12.0	7.0	8.5	10.0	5.5	7.5	9.5	4.5	6.0	4.5	1.0	2.0
8	9.0	8.0	8.5	9.5	5.0	6.5	9.5	4.0	6.0	6.0	1.5	3.0
9	10.5	7.0	8.0	10.0	4.0	6.0	9.0	4.0	5.5	7.0	2.5	4.0
10	11.0	6.5	8.5	9.5	4.0	6.0	9.0	5.0	6.5	8.0	3.0	4.5
11	9.5	7.0	8.0	10.0	4.0	6.0	9.0	5.0	6.5	7.0	3.5	5.0
12	11.0	7.0	8.0	10.0	4.0	6.0	8.5	4.5	6.0	7.0	3.0	4.5
13	11.0	6.5	8.5	10.5	5.0	7.0	7.0	5.0	6.0	7.5	3.5	5.0
14	10.0	7.0	8.0	9.5	6.0	7.0	7.0	4.5	5.5	7.0	2.5	4.5
15	9.0	6.5	7.5	9.5	5.5	7.0	8.5	4.5	6.0	7.5	3.0	4.5
16	9.5	6.5	7.5	10.5	5.0	6.5	7.0	3.5	5.0	8.5	3.5	5.5
17	10.0	7.0	8.0	9.0	4.5	6.5	7.0	2.5	4.5	8.0	4.0	5.5
18	10.5	6.0	7.5	7.5	5.0	6.0	7.0	2.5	4.5	7.5	4.5	5.5
19	11.0	5.5	7.5	8.0	3.5	5.0	8.0	5.0	6.5	8.0	3.5	5.5
20	10.5	5.5	7.5	8.0	3.5	5.5	9.0	5.5	6.5	8.0	3.5	5.5
21	10.5	5.5	7.0	8.5	4.5	6.0	6.5	5.0	6.0	5.5	3.0	4.5
22	10.0	5.0	6.5	9.0	5.5	7.0	7.0	3.5	5.0	6.5	3.0	4.5
23	10.0	4.5	7.0	9.5	5.5	7.0	6.5	2.0	3.5	6.0	2.5	4.0
24	7.5	6.0	6.5	9.5	5.5	6.5	5.5	1.5	4.0	8.5	4.5	6.0
25	9.5	5.5	7.0	6.0	4.5	5.0	6.5	3.5	5.0	9.0	3.5	5.5
26	10.5	5.0	7.0	7.5	2.5	4.0	5.5	2.5	4.0	10.0	5.0	6.5
27	10.5	6.0	7.5	7.0	3.0	5.0	6.5	2.0	4.5	9.0	3.5	5.5
28	9.5	6.0	7.5	7.5	3.5	5.0	5.5	1.5	3.0	9.5	3.0	5.5
29	8.5	5.5	7.0	6.5	4.0	5.0	7.5	3.5	5.0	8.0	3.0	5.5
30	7.5	4.5	5.5	7.0	3.5	5.0	8.5	4.0	6.0	9.0	2.5	4.5
31	9.5	3.0	5.5	---	---	---	7.0	3.5	5.0	8.5	3.5	5.5
MONTH	12.5	3.0	7.5	11.0	2.5	6.0	9.5	1.5	5.5	10.0	1.0	5.0

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306022 STEWART GULCH AB WEST FORK NR RIO BLANCO, CO STREAM SOURCE AGENCY USGS
LATITUDE 394848 LONGITUDE 1081100 DRAINAGE AREA 44.00 DATUM 6430.00 STATE 08 COUNTY 103

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.0	4.5	5.5	9.5	5.0	7.0	8.0	7.0	7.5	12.0	7.5	9.5
2	8.5	3.5	5.0	11.0	7.0	8.0	8.0	6.5	7.0	12.5	7.5	9.5
3	7.0	3.0	4.5	8.5	5.5	6.5	8.0	6.5	7.0	12.5	8.5	10.0
4	6.0	1.5	3.0	9.5	5.0	6.5	8.0	7.0	7.5	---	---	---
5	6.5	1.0	2.5	8.5	4.5	6.0	7.5	6.5	7.0	13.0	6.0	9.0
6	7.0	1.0	3.0	11.0	4.0	6.5	11.5	6.0	8.5	14.0	5.0	8.5
7	8.0	1.5	4.0	11.0	5.5	7.0	7.5	4.0	6.0	12.5	5.5	8.5
8	8.0	2.0	5.0	9.5	5.0	7.0	11.5	3.5	6.5	14.0	7.0	9.5
9	7.0	2.0	4.5	10.5	5.0	7.0	13.0	4.5	7.5	14.0	7.0	9.0
10	8.5	3.0	5.0	10.0	5.5	7.0	14.0	4.5	8.0	13.0	6.5	9.0
11	8.5	3.0	5.0	9.5	6.5	7.5	13.0	6.0	9.0	12.0	6.5	9.0
12	9.5	3.0	5.0	11.5	5.5	7.5	10.5	7.0	8.5	8.0	5.0	6.5
13	10.0	3.5	6.5	13.0	5.0	7.5	12.5	6.5	9.0	12.5	6.5	8.0
14	9.5	6.0	7.0	10.5	5.5	7.5	12.0	6.5	9.0	13.5	7.0	9.0
15	9.5	5.5	7.0	11.0	6.5	7.5	10.5	6.5	8.0	13.0	6.0	9.0
16	8.5	5.5	6.5	11.0	5.5	7.5	10.5	6.0	8.0	15.5	6.5	9.5
17	10.5	5.0	6.5	12.0	5.0	8.0	11.0	6.0	8.0	14.5	5.0	10.0
18	11.0	4.5	6.0	11.5	5.5	7.5	9.5	6.5	8.0	15.0	7.0	10.0
19	11.0	4.0	6.5	8.0	5.0	6.5	9.0	6.0	7.5	13.0	7.5	9.5
20	11.0	4.5	6.5	9.0	5.0	6.5	9.0	5.0	6.5	15.5	5.5	10.0
21	11.5	5.0	6.5	8.0	5.0	6.0	13.5	4.0	7.5	17.0	6.0	10.5
22	10.5	5.0	6.5	9.5	5.0	6.5	14.5	4.5	8.5	15.0	6.5	10.0
23	10.0	5.5	6.5	10.0	5.0	7.0	11.5	6.0	8.0	17.0	7.0	11.0
24	10.5	4.5	6.5	9.5	5.5	7.0	14.0	6.0	9.5	15.5	7.0	10.0
25	11.5	5.0	7.0	9.5	6.0	7.5	12.0	6.5	8.5	16.0	6.5	10.5
26	11.5	4.5	7.0	8.0	7.0	7.5	11.5	7.0	8.5	18.0	6.5	11.0
27	10.0	5.5	7.0	8.5	7.0	7.5	11.5	7.5	9.0	17.5	7.0	11.0
28	11.0	5.5	7.5	9.0	7.0	7.5	14.0	6.5	9.5	14.0	7.0	10.0
29	---	---	---	7.5	6.5	7.0	12.0	7.5	9.0	16.0	6.5	10.5
30	---	---	---	7.5	6.0	6.5	12.5	6.5	9.0	13.5	7.0	9.0
31	---	---	---	8.5	6.0	7.0	---	---	---	17.0	6.5	11.0
MONTH	11.5	1.0	5.5	13.0	4.0	7.0	14.5	3.5	8.0	18.0	5.0	9.5

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306022 STEWART GULCH AB WEST FORK NR RIO BLANCO, CO STREAM SOURCE AGENCY USGS
LATITUDE 394848 LONGITUDE 1081100 DRAINAGE AREA 44.00 DATUM 6430.00 STATE 08 COUNTY 103

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	15.0	7.0	10.0	16.5	8.5	11.5	15.0	8.0	11.5	13.5	8.0	10.5
2	14.5	6.5	10.0	16.5	7.5	11.0	13.0	10.0	11.0	13.5	7.0	10.0
3	16.0	7.5	10.5	17.0	7.5	11.5	14.0	9.5	11.5	13.5	7.5	10.0
4	16.5	6.5	10.5	16.5	7.5	11.0	14.0	8.0	11.0	12.5	8.0	10.0
5	16.5	6.5	10.5	13.5	8.5	10.5	14.0	8.5	11.0	13.0	9.5	10.5
6	16.0	6.0	10.0	15.5	7.0	10.5	14.0	8.5	10.5	13.0	8.0	10.0
7	17.0	5.5	10.5	14.0	6.5	10.0	14.0	7.5	11.0	11.5	8.0	9.5
8	16.0	6.0	10.0	13.5	8.5	10.5	13.5	9.0	11.0	11.5	8.5	9.5
9	17.0	6.0	10.5	14.5	7.5	11.0	13.5	9.0	11.0	11.0	8.0	9.5
10	15.0	6.0	10.0	16.0	7.0	11.0	13.5	7.0	10.0	12.0	9.0	10.0
11	18.0	7.0	11.5	15.5	8.0	11.0	13.5	9.0	10.5	10.0	9.0	9.5
12	14.5	7.5	10.5	15.5	8.0	11.0	12.0	7.5	10.0	11.5	8.0	9.5
13	14.5	7.5	10.5	14.5	8.5	10.5	12.0	8.5	10.0	9.5	8.0	8.5
14	15.0	7.0	9.5	15.0	7.5	11.0	13.0	9.5	11.0	9.5	7.0	8.5
15	14.5	7.0	10.0	15.0	6.5	11.0	14.5	8.5	11.0	13.0	7.5	9.5
16	18.0	7.0	11.5	15.5	6.5	12.0	13.0	9.0	10.5	12.5	7.5	9.5
17	18.0	8.0	12.0	15.0	8.0	11.5	13.5	8.5	10.0	12.0	8.5	10.0
18	14.5	8.5	10.5	14.5	8.5	11.0	14.0	8.0	10.5	11.0	7.5	9.0
19	17.0	7.5	11.0	15.5	7.5	11.0	14.0	7.0	11.0	11.5	7.5	9.5
20	17.5	7.0	11.5	14.0	7.5	10.5	13.0	9.0	11.0	12.5	8.0	9.5
21	14.5	7.5	10.0	14.5	7.0	11.0	13.5	9.5	11.0	12.5	8.0	9.5
22	14.0	8.0	10.0	15.5	9.5	12.0	12.0	9.5	10.5	13.0	7.5	9.5
23	16.0	8.0	11.0	15.5	9.0	12.0	13.5	9.0	10.5	13.0	8.0	10.0
24	16.5	6.0	11.5	14.5	9.0	11.5	14.5	9.5	11.0	12.0	7.0	9.5
25	15.5	8.0	10.5	15.0	9.0	11.5	12.0	9.0	10.5	11.0	8.5	9.5
26	17.0	7.0	11.5	14.0	9.0	11.0	13.0	8.5	10.5	12.0	9.5	10.0
27	18.0	7.5	12.0	13.0	9.5	11.0	12.0	8.5	10.0	10.5	8.5	9.5
28	17.5	8.0	12.0	13.0	6.5	10.5	13.0	8.5	10.5	9.0	7.5	8.0
29	17.0	8.0	11.5	14.0	9.5	11.5	13.0	9.0	10.5	9.5	7.0	8.0
30	16.5	9.0	11.5	15.5	8.5	11.5	14.0	8.5	10.5	10.0	7.5	8.5
31	---	---	---	15.0	8.5	11.5	12.0	8.5	10.0	---	---	---
MONTH	18.0	5.5	11.0	17.0	6.5	11.0	15.0	7.0	10.5	13.5	7.0	9.5
YEAR	18.0	1.0	8.0									

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                              UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY           PROCESS DATE IS 10-31-83

STATION NUMBER   09306036        SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO.          STREAM    SOURCE AGENCY USGS
LATITUDE  394930     LONGITUDE  1081155          DRAINAGE AREA         3.62   DATUM  6372.00   STATE 08  COUNTY 103

                         DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY       MAX     MIN    MEAN         MAX     MIN    MEAN         MAX     MIN    MEAN         MAX     MIN    MEAN

                OCTOBER                    NOVEMBER                    DECEMBER                     JANUARY

  1                       .00                         .00                         .00                         .00
  2                       .00                         .00                         .00                         .00
  3                       .00                         .00                         .00                         .00
  4                       .00                         .00                         .00                         .00
  5                       .00                         .00                         .00                         .00

  6                       .00                         .00                         .00                         .00
  7                       .00                         .00                         .00                         .00
  8                       .00                         .00                         .00                         .00
  9                       .00                         .00                         .00                         .00
 10                       .00                         .00                         .00                         .00

 11                       .00                         .00                         .00                         .00
 12                       .00                         .00                         .00                         .00
 13                       .00                         .00                         .00                         .00
 14                       .00                         .00                         .00                         .00
 15                       .00                         .00                         .00                         .00

 16                       .00                         .00                         .00                         .00
 17                       .00                         .00                         .00                         .00
 18                       .00                         .00                         .00                         .00
 19                       .00                         .00                         .00                         .00
 20                       .00                         .00                         .00                         .00

 21                       .00                         .00                         .00                         .00
 22                       .00                         .00                         .00                         .00
 23                       .00                         .00                         .00                         .00
 24                       .00                         .00                         .00                         .00
 25                       .00                         .00                         .00                         .00

 26                       .00                         .00                         .00                         .00
 27                       .00                         .00                         .00                         .00
 28                       .00                         .00                         .00                         .00
 29                       .00                         .00                         .00                         .00
 30                       .00                         .00                         .00                         .00
 31                       .00                                                     .00                         .00

MONTH                     .00                         .00                         .00                         .00
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                   UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY          PROCESS DATE IS 10-31-83

STATION NUMBER   09306036       SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO.        STREAM    SOURCE AGENCY USGS
LATITUDE  394930      LONGITUDE  1081155         DRAINAGE AREA        3.62   DATUM  6372.00  STATE 08  COUNTY 103

                 DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY       MAX     MIN    MEAN        MAX     MIN    MEAN        MAX     MIN    MEAN        MAX     MIN    MEAN

              FEBRUARY                   MARCH                       APRIL                       MAY

  1                       .00                        .00                        .00                        .00
  2                       .00                        .00                        .00                        .00
  3                       .00                        .00                        .00                        .00
  4                       .00                        .00                        .00                        .00
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  6                       .00                        .00                        .00                        .00
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 27                       .00                        .00                        .00                        .00
 28                       .00                        .00                        .00                        .00
 29                                                  .00                        .00                        .00
 30                                                  .00                        .00                        .00
 31                                                  .00                                                   .00

MONTH                     .00                        .00                        .00                        .00
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UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306036 SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394930 LONGITUDE 1081155 DRAINAGE AREA 3.62 DATUM 6372.00 STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1			.00			.00			.00			.00
2			.00			.00			.02			.00
3			.00			.00			.00			.00
4			.00			.00			.00			.00
5			.00			.00			.00			.00
6			.00			.00			.00			.00
7			.00			.00			.00			.00
8			.00			.00			.00			.00
9			.00			.00			.00			.21
10			.00			.00			.00			.00
11			.00			.00			.00			.00
12			.00			.00			.00			.00
13			.00			.00			.00			.00
14			.00			.00			.00			.00
15			.00			.00			.00			.00
16			.00			.00			.00			.00
17			.00			.00			.02			.00
18			.00			.00			.00			.00
19			.00			.00			.00			.00
20			.00			.00			.00			.00
21			.00			.00			.00			.00
22			.00			.00			.00			.00
23			.00			.00			.00			.00
24			.00			.00			.00			.00
25			.00			.00			.00			.00
26			.00			.00			.00			.00
27			.00			.00			.00			.00
28			.00			.00			.00			.00
29			.00			.00			.00			.03
30			.00			.00			.00			.01
31						.00			.00			
MONTH			.00			.00			.00			.01
YEAR	---	---	.00									

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                              UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY          PROCESS DATE IS 10-31-83

STATION NUMBER   09306036        SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO.          STREAM    SOURCE AGENCY USGS
LATITUDE  394930      LONGITUDE  1081155          DRAINAGE AREA        3.62   DATUM  6372.00   STATE 08  COUNTY 103

                     SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY       MAX     MIN    MEAN         MAX     MIN    MEAN         MAX     MIN    MEAN         MAX     MIN    MEAN

                 OCTOBER                     NOVEMBER                    DECEMBER                      JANUARY

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MONTH
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UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306036 SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394930 LONGITUDE 1081155 DRAINAGE AREA 3.62 DATUM 6372.00 STATE 08 COUNTY 103

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
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31												
MONTH												

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306036 SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394930 LONGITUDE 1081155 DRAINAGE AREA 3.62 DATUM 6372.00 STATE 08 COUNTY 103

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1									---			---
2									1.6			---
3									---			---
4									---			---
5									---			---
6									---			---
7									---			---
8									---			---
9									---			14
10									---			---
11									---			---
12									---			---
13									---			---
14									---			---
15									---			---
16									---			---
17									1.5			---
18									---			---
19									---			---
20									---			---
21									---			---
22									---			---
23									---			---
24									---			---
25									---			---
26									---			---
27									---			---
28									---			---
29									---			2.0
30									---			1.0
31									---			
MONTH									1.6			5.7
YEAR	---	---	4.0									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

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                    UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY          PROCESS DATE IS 10-31-83

STATION NUMBER   09306036       SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO.          STREAM    SOURCE AGENCY USGS
LATITUDE  394930     LONGITUDE  1081155        DRAINAGE AREA         3.62   DATUM  6372.00   STATE 08  COUNTY 103

               SEDIMENT, SUSPENDED CONCENTRATION (MG/L), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY       MAX     MIN    MEAN        MAX     MIN    MEAN        MAX     MIN    MEAN        MAX     MIN    MEAN

               OCTOBER                   NOVEMBER                   DECEMBER                    JANUARY

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MONTH
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                        UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY           PROCESS DATE IS 10-31-83

STATION NUMBER   09306036       SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO.        STREAM    SOURCE AGENCY USGS
LATITUDE  394930     LONGITUDE  1081155         DRAINAGE AREA       3.62   DATUM  6372.00   STATE 08  COUNTY 103

                 SEDIMENT, SUSPENDED CONCENTRATION (MG/L), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY      MAX     MIN    MEAN        MAX     MIN    MEAN        MAX     MIN    MEAN        MAX     MIN    MEAN

                FEBRUARY                        MARCH                         APRIL                        MAY

  1
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MONTH
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                           UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY           PROCESS DATE IS 10-31-83

STATION NUMBER   09306036        SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO.          STREAM    SOURCE AGENCY USGS
LATITUDE  394930      LONGITUDE  1081155          DRAINAGE AREA         3.62   DATUM  6372.00   STATE 08  COUNTY 103

                    SEDIMENT, SUSPENDED CONCENTRATION (MG/L), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY        MAX      MIN    MEAN          MAX      MIN    MEAN          MAX      MIN    MEAN          MAX      MIN    MEAN

                    JUNE                          JULY                          AUGUST                       SEPTEMBER

  1                                                                                     ---                           ---
  2                                                                                    2290                           ---
  3                                                                                     ---                           ---
  4                                                                                     ---                           ---
  5                                                                                     ---                           ---

  6                                                                                     ---                           ---
  7                                                                                     ---                           ---
  8                                                                                     ---                           ---
  9                                                                                     ---                          2080
 10                                                                                     ---                           ---

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 27                                                                                     ---                           ---
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 30                                                                                     ---                           ---
 31                                                                                     ---

MONTH                                                                                  2290                          2080

YEAR       ---      ---    2190

NOTE:    NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR
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UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306039 COTTONWOOD GULCH NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394936 LONGITUDE 1081225 DRAINAGE AREA 1.20 DATUM 6353.00 STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1			.00			.00			.00			.00
2			.00			.00			.00			.00
3			.00			.00			.00			.00
4			.00			.00			.00			.00
5			.00			.00			.00			.00
6			.00			.00			.00			.00
7			.00			.00			.00			.00
8			.00			.00			.00			.00
9			.00			.00			.00			.00
10			.00			.00			.00			.00
11			.00			.00			.00			.00
12			.00			.00			.00			.00
13			.00			.00			.00			.00
14			.00			.00			.00			.00
15			.00			.00			.00			.00
16			.00			.00			.00			.00
17			.00			.00			.00			.00
18			.00			.00			.00			.00
19			.00			.00			.00			.00
20			.00			.00			.00			.00
21			.00			.00			.00			.00
22			.00			.00			.00			.00
23			.00			.00			.00			.00
24			.00			.00			.00			.00
25			.00			.00			.00			.00
26			.00			.00			.00			.00
27			.00			.00			.00			.00
28			.00			.00			.00			.00
29			.00			.00			.00			.00
30			.00			.00			.00			.00
31			.00						.00			.00
MONTH			.00			.00			.00			.00

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306039 COTTONWOOD GULCH NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394936 LONGITUDE 1081225 DRAINAGE AREA 1.20 DATUM 6353.00 STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1			.00			.00			.00			.00
2			.00			.00			.00			.00
3			.00			.00			.00			.00
4			.00			.00			.00			.00
5			.00			.00			.00			.00
6			.00			.00			.00			.00
7			.00			.00			.00			.00
8			.00			.00			.00			.00
9			.00			.00			.00			.00
10			.00			.00			.00			.00
11			.00			.00			.00			.00
12			.00			.00			.00			.00
13			.00			.00			.00			.00
14			.00			.00			.00			.00
15			.00			.00			.00			.00
16			.00			.00			.00			.00
17			.00			.10			.00			.00
18			.00			.00			.00			.00
19			.00			.00			.00			.00
20			.00			.00			.00			.00
21			.00			.00			.00			.00
22			.00			.00			.00			.00
23			.00			.00			.00			.00
24			.00			.00			.00			.00
25			.00			.00			.00			.00
26			.00			.00			.00			.00
27			.00			.00			.00			.00
28			.00			.00			.00			.00
29						.00			.00			.00
30						.00			.00			.00
31						.00						.00
MONTH			.00			.00			.00			.00

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY   PROCESS DATE IS 10-31-83

STATION NUMBER   09306039   COTTONWOOD GULCH NEAR RIO BLANCO, CO.   STREAM   SOURCE AGENCY USGS
LATITUDE 394936   LONGITUDE 1081225   DRAINAGE AREA   1.20   DATUM 6353.00   STATE 08   COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1			.00			.00			.00			.00
2			.00			.00			.00			.00
3			.00			.00			.00			.00
4			.00			.00			.00			.00
5			.00			.00			.00			.00
6			.00			.00			.00			.00
7			.00			.00			.00			.00
8			.00			.00			.00			.00
9			.00			.00			.00			.00
10			.00			.00			.00			.00
11			.00			.00			.00			.00
12			.00			.00			.00			.00
13			.00			.00			.00			.00
14			.00			.00			.00			.00
15			.00			.00			.00			.00
16			.00			.00			.00			.00
17			.00			.00			.00			.00
18			.00			.00			.00			.00
19			.00			.00			.00			.00
20			.00			.00			.00			.00
21			.00			.00			.00			.00
22			.00			.00			.00			.00
23			.00			.00			.00			.00
24			.00			.00			.00			.00
25			.00			.00			.00			.00
26			.00			.00			.00			.00
27			.00			.00			.00			.00
28			.00			.00			.00			.00
29			.00			.00			.00			.00
30			.00			.00			.00			.00
31						.00			.00			
MONTH			.00			.00			.00			.00
YEAR	---	---	.00									

```
                       UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY          PROCESS DATE IS 10-31-83

STATION NUMBER   09306042        PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO.        STREAM     SOURCE AGENCY USGS
LATITUDE  395001      LONGITUDE  1081312          DRAINAGE AREA         1.06   DATUM  6335.00   STATE 08  COUNTY 103

                    DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY        MAX     MIN    MEAN          MAX     MIN    MEAN          MAX     MIN    MEAN          MAX     MIN    MEAN

                 OCTOBER                     NOVEMBER                     DECEMBER                      JANUARY

  1                        .00                          .00                          .00                          .00
  2                        .00                          .00                          .00                          .00
  3                        .77                          .00                          .00                          .00
  4                        .95                          .00                          .00                          .00
  5                        .90                          .00                          .00                          .00

  6                        .00                          .00                          .00                          .00
  7                        .00                          .00                          .00                          .00
  8                        .75                          .00                          .00                          .00
  9                        .43                          .00                          .00                          .00
 10                        .00                          .00                          .00                          .00

 11                        .57                          .00                          .00                          .00
 12                        .15                          .00                          .00                          .00
 13                        .50                          .00                          .00                          .00
 14                        .00                          .00                          .00                          .00
 15                        .65                          .00                          .00                          .00

 16                        .63                          .00                          .00                          .00
 17                        .00                          .00                          .00                          .00
 18                        .00                          .00                          .00                          .00
 19                        .00                          .00                          .00                          .00
 20                        .00                          .00                          .00                          .00

 21                        .00                          .00                          .00                          .00
 22                        .00                          .00                          .00                          .00
 23                        .00                          .00                          .00                          .00
 24                        .00                          .00                          .00                          .00
 25                        .00                          .00                          .00                          .00

 26                        .00                          .00                          .00                          .07
 27                        .00                          .00                          .00                          .00
 28                        .00                          .00                          .00                          .00
 29                        .00                          .00                          .00                          .00
 30                        .00                          .00                          .00                          .00
 31                        .00                                                       .00                          .00

MONTH                      .20                          .00                          .00                          .00
```

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395001 LONGITUDE 1081312 DRAINAGE AREA 1.06 DATUM 6335.00 STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1			.00			.00			.00			.00
2			.00			.00			.00			.00
3			.00			.00			.00			.00
4			.00			.00			.00			.00
5			.00			.00			.00			.00
6			.00			.00			.00			.00
7			.00			.00			.00			.00
8			.00			.00			.00			.00
9			.00			.00			.00			.00
10			.00			.00			.00			.00
11			.00			.00			.00			.00
12			.00			.00			.00			.00
13			.00			.00			.00			.00
14			.00			.00			.00			.00
15			.00			.00			.00			.00
16			.00			.00			.00			.00
17			.00			.00			.00			.00
18			.00			.00			.00			.00
19			.00			.00			.00			.00
20			.00			.00			.00			.00
21			.00			.00			.00			.00
22			.10			.00			.00			.00
23			.15			.00			.00			.00
24			.00			.00			.00			.00
25			.00			.00			.00			.00
26			.00			.00			.00			.00
27			.00			.00			.00			.00
28			.00			.00			.00			.00
29						.00			.00			.00
30						.00			.00			.00
31						.00						.00
MONTH			.01			.00			.00			.00

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395001 LONGITUDE 1081312 DRAINAGE AREA 1.06 DATUM 6335.00 STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1			.00			.00			.71			.80
2			.00			.00			2.3			.60
3			.00			.00			.96			.27
4			.00			.06			1.0			.39
5			.00			.73			.77			.49
6			.00			1.3			.93			.44
7			.00			1.5			.67			.41
8			.00			1.3			.77			.37
9			.00			.60			.67			.37
10			.00			.70			.67			.32
11			.00			.77			.58			.97
12			.00			.90			1.0			.53
13			.00			1.2			.97			1.0
14			.00			.80			.82			1.1
15			.00			.77			.71			.88
16			.00			.77			.62			.38
17			.00			.82			.52			.54
18			.00			.77			.86			.70
19			.00			.77			.99			.77
20			.00			.77			.88			.69
21			.00			.82			.79			.72
22			.00			.82			.80			.71
23			.00			.77			.92			.67
24			.00			.82			.92			.70
25			.00			.77			.84			.70
26			.00			.71			1.0			.70
27			.00			.53			1.1			.80
28			.00			.67			1.1			.80
29			.00			.67			.91			.80
30			.00			.71			.85			.80
31						.71			.72			
MONTH			.00			.73			.88			.65
YEAR	---	---	.21									

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395001 LONGITUDE 1081312 DRAINAGE AREA 1.06 DATUM 6335.00 STATE 08 COUNTY 103

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1			---									---
2			---									---
3			.78									---
4			.56									---
5			.99									---
6			---									---
7			---									---
8			.57									---
9			.20									---
10			---									---
11			.22									---
12			.05									---
13			.12									---
14			---									---
15			3.3									---
16			.50									---
17			---									---
18			---									---
19			---									---
20			---									---
21			---									---
22			---									---
23			---									---
24			---									---
25			---									---
26			---									.02
27			---									---
28			---									---
29			---									---
30			---									---
31			---									---
MONTH			.73									.02

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395001 LONGITUDE 1081312 DRAINAGE AREA 1.06 DATUM 6335.00 STATE 08 COUNTY 103

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1			---									
2			---									
3			---									
4			---									
5			---									
6			---									
7			---									
8			---									
9			---									
10			---									
11			---									
12			---									
13			---									
14			---									
15			---									
16			---									
17			---									
18			---									
19			---									
20			---									
21			---									
22			.02									
23			.03									
24			---									
25			---									
26			---									
27			---									
28			---									
29												
30												
31												
MONTH			.03									

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395001 LONGITUDE 1081312 DRAINAGE AREA 1.06 DATUM 6335.00 STATE 08 COUNTY 103

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1						---			1.0			.50
2						---			50			.30
3						---			25			.05
4						1.0			15			.05
5						22			2.0			.05
6						25			1.0			.05
7						20			.50			.05
8						10			.50			.05
9						1.0			.50			.05
10						1.0			.50			.05
11						1.0			.50			1.0
12						1.0			1.0			.50
13						1.5			1.0			1.0
14						.86			.80			1.0
15						.70			.50			.18
16						.50			.50			.05
17						.30			.33			.04
18						.19			2.0			.08
19						.20			1.5			.10
20						.28			1.0			.10
21						.30			.50			.12
22						.30			.50			.10
23						.28			1.0			.04
24						.30			1.0			.10
25						2.7			.80			.10
26						3.0			1.0			.12
27						1.0			1.0			.20
28						1.3			1.0			.27
29						1.0			.80			.20
30						1.0			.50			.20
31						1.0			.50			
MONTH						3.5			3.7			.22
YEAR	---	---	2.2									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395001 LONGITUDE 1081312 DRAINAGE AREA 1.06 DATUM 6335.00 STATE 08 COUNTY 103

SEDIMENT, SUSPENDED CONCENTRATION (MG/L), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1			---									
2			---									
3			112									
4			91									
5			225									
6			---									
7			---									
8			129									
9			---									
10			---									
11			55									
12			---									
13			39									
14			---									
15			434									
16			---									
17			---									
18			---									
19			---									
20			---									
21			---									
22			---									
23			---									
24			---									
25			---									
26			---									
27			---									
28			---									
29			---									
30			---									
31			---									
MONTH			155									

```
                              UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY          PROCESS DATE IS 10-31-83

STATION NUMBER   09306042        PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO.        STREAM    SOURCE AGENCY USGS
LATITUDE  395001     LONGITUDE  1081312         DRAINAGE AREA        1.06   DATUM  6335.00   STATE 08  COUNTY 103

                    SEDIMENT, SUSPENDED CONCENTRATION (MG/L), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY        MAX     MIN    MEAN         MAX     MIN    MEAN         MAX     MIN    MEAN         MAX     MIN    MEAN

                 FEBRUARY                     MARCH                      APRIL                        MAY

  1
  2
  3
  4
  5

  6
  7
  8
  9
 10

 11
 12
 13
 14
 15

 16
 17
 18
 19
 20

 21
 22
 23
 24
 25

 26
 27
 28
 29
 30
 31

MONTH
```

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395001 LONGITUDE 1081312 DRAINAGE AREA 1.06 DATUM 6335.00 STATE 08 COUNTY 103

SEDIMENT, SUSPENDED CONCENTRATION (MG/L), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1						---			---			---
2						---			---			---
3						---			11700			---
4						---			---			---
5						11000			---			---
6						---			---			---
7						---			---			---
8						---			---			---
9						---			---			---
10						---			---			---
11						---			---			---
12						---			---			---
13						---			---			---
14						397			---			---
15						337			---			78
16						---			---			---
17						---			236			26
18						90			545			42
19						---			552			---
20						137			---			---
21						---			---			64
22						---			---			---
23						136			---			23
24						---			---			---
25						1180			---			---
26						1360			---			65
27						---			---			---
28						740			---			125
29						---			---			---
30						---			---			---
31						---			---			
MONTH						1710			3260			60
YEAR	---	---	1110									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395001 LONGITUDE 1081312 DRAINAGE AREA 1.06 DATUM 6335.00 STATE 08 COUNTY 103

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1										---	---	---
2										---	---	---
3										---	---	---
4										---	---	---
5										---	---	---
6										---	---	---
7										---	---	---
8										---	---	---
9										---	---	---
10										---	---	---
11										---	---	---
12										---	---	---
13										---	---	---
14										---	---	---
15										---	---	---
16										---	---	---
17										---	---	---
18										---	---	---
19										---	---	---
20										---	---	---
21										---	---	---
22										---	---	---
23										---	---	---
24										---	---	---
25										---	---	---
26										230	220	220
27										---	---	---
28										---	---	---
29										---	---	---
30										---	---	---
31										---	---	---
MONTH										230	220	220

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395001 LONGITUDE 1081312 DRAINAGE AREA 1.06 DATUM 6335.00 STATE 08 COUNTY 103

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---									
2	---	---	---									
3	---	---	---									
4	---	---	---									
5	---	---	---									
6	---	---	---									
7	---	---	---									
8	---	---	---									
9	---	---	---									
10	---	---	---									
11	---	---	---									
12	---	---	---									
13	---	---	---									
14	---	---	---									
15	---	---	---									
16	---	---	---									
17	---	---	---									
18	---	---	---									
19	---	---	---									
20	---	---	---									
21	---	---	---									
22	330	290	300									
23	330	300	315									
24	---	---	---									
25	---	---	---									
26	---	---	---									
27	---	---	---									
28	---	---	---									
29	---	---	---									
30	---	---	---									
31	---	---	---									
MONTH	330	290	308									

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395001 LONGITUDE 1081312 DRAINAGE AREA 1.06 DATUM 6335.00 STATE 08 COUNTY 103

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1				---	---	---	2040	1890	1950	---	---	---
2				---	---	---	1980	586	1790	---	---	---
3				---	---	---	1960	1830	1890	---	---	---
4				1990	1930	1960	---	---	---	---	---	---
5				---	---	---	---	---	---	---	---	---
6				---	---	---	---	---	---	---	---	---
7				---	---	---	---	---	---	---	---	---
8				---	---	---	---	---	---	---	---	---
9				---	---	---	---	---	---	---	---	---
10				2030	1910	1970	---	---	---	---	---	---
11				2010	1880	1920	---	---	---	---	---	---
12				---	---	---	---	---	---	---	---	---
13				---	---	---	---	---	---	---	---	---
14				2010	1890	1950	---	---	---	---	---	---
15				2000	1820	1900	---	---	---	1960	1890	1910
16				2090	1890	1940	---	---	---	2000	1870	1950
17				2100	1900	1950	1990	1870	1940	2000	1700	1800
18				2030	1900	1950	2060	1920	1970	1960	1730	1840
19				---	---	---	2060	1900	1960	2080	1980	2050
20				1980	1900	1940	2060	1930	1970	2100	2000	2040
21				2030	1900	1960	2050	1940	1970	2120	2010	2040
22				2120	1920	2020	2000	1920	1950	2100	2030	2050
23				2090	1930	2000	2040	1880	1940	2120	1990	2040
24				2030	1900	1960	2060	1870	1960	2030	1930	1990
25				2000	1430	1880	1970	1860	1920	2020	1950	1980
26				2020	1900	1930	2010	1860	1920	2080	1970	2020
27				1990	1910	1950	1910	1810	1860	2040	1910	1990
28				1950	1810	1890	2000	1860	1930	2040	1860	1950
29				2000	1900	1930	2050	1910	1980	2010	1750	1940
30				2030	1880	1940	2090	1950	2000	2000	1800	1930
31				2040	1870	1940	2050	1910	1960	---	---	---
MONTH				2120	1430	1940	2090	586	1940	2120	1700	1970
YEAR	2120	220	1860									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395001 LONGITUDE 1081312 DRAINAGE AREA 1.06 DATUM 6335.00 STATE 08 COUNTY 103

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1										---	---	---
2										---	---	---
3										---	---	---
4										---	---	---
5										---	---	---
6										---	---	---
7										---	---	---
8										---	---	---
9										---	---	---
10										---	---	---
11										---	---	---
12										---	---	---
13										---	---	---
14										---	---	---
15										---	---	---
16										---	---	---
17										---	---	---
18										---	---	---
19										---	---	---
20										---	---	---
21										---	---	---
22										---	---	---
23										---	---	---
24										---	---	---
25										---	---	---
26										.0	.0	.0
27										---	---	---
28										---	---	---
29										---	---	---
30										---	---	---
31										---	---	---
MONTH										.0	.0	.0

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY   PROCESS DATE IS 10-31-83

STATION NUMBER   09306042   PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO.   STREAM   SOURCE AGENCY USGS
LATITUDE 395001   LONGITUDE 1081312   DRAINAGE AREA   1.06   DATUM 6335.00   STATE 08 COUNTY 103

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---									
2	---	---	---									
3	---	---	---									
4	---	---	---									
5	---	---	---									
6	---	---	---									
7	---	---	---									
8	---	---	---									
9	---	---	---									
10	---	---	---									
11	---	---	---									
12	---	---	---									
13	---	---	---									
14	---	---	---									
15	---	---	---									
16	---	---	---									
17	---	---	---									
18	---	---	---									
19	---	---	---									
20	---	---	---									
21	---	---	---									
22	3.0	.0	.0									
23	1.0	.0	.5									
24	---	---	---									
25	---	---	---									
26	---	---	---									
27	---	---	---									
28	---	---	---									
29	---	---	---									
30	---	---	---									
31	---	---	---									
MONTH	3.0	.0	.5									

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY   PROCESS DATE IS 10-31-83

STATION NUMBER   09306042   PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO.   STREAM   SOURCE AGENCY USGS
LATITUDE 395001   LONGITUDE 1081312   DRAINAGE AREA   1.06   DATUM 6335.00   STATE 08 COUNTY 103

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1				---	---	---	29.5	14.0	20.5	27.5	11.5	17.0
2				---	---	---	25.0	16.5	19.0	27.0	10.5	17.0
3				---	---	---	27.5	15.5	20.5	27.0	10.0	17.0
4				16.5	10.5	14.5	29.5	14.5	20.0	25.0	11.5	17.0
5				22.5	10.5	16.0	29.5	14.0	20.0	25.0	14.5	17.5
6				27.0	9.5	17.0	30.5	14.5	20.5	27.0	12.0	17.0
7				27.5	9.5	16.5	31.0	14.5	20.0	22.0	12.5	15.5
8				24.0	10.5	16.5	28.5	15.0	20.0	23.0	12.5	16.5
9				26.5	10.0	17.5	29.5	15.5	20.5	21.0	12.0	16.0
10				29.5	10.5	18.0	28.5	14.5	19.0	23.5	13.5	16.5
11				29.5	13.0	18.5	28.5	16.0	19.0	16.0	12.5	14.0
12				30.0	10.0	18.5	22.0	16.5	18.0	21.5	11.5	14.0
13				28.0	10.0	18.0	23.5	15.5	18.0	14.0	10.5	11.5
14				28.5	10.5	18.0	26.0	16.0	20.5	15.0	9.5	11.5
15				27.0	11.5	17.5	28.5	16.0	20.5	22.0	9.5	13.5
16				27.5	12.0	18.0	28.0	16.5	21.0	23.5	9.0	14.5
17				27.0	15.0	19.0	30.5	15.5	19.5	21.5	11.5	15.0
18				28.0	13.0	19.5	31.5	16.0	22.0	23.5	10.5	14.5
19				29.5	12.5	19.0	31.0	15.5	21.0	20.5	11.5	14.5
20				28.0	12.5	18.5	29.5	16.0	20.5	23.0	11.0	15.0
21				28.5	13.5	20.0	30.0	17.5	21.0	24.0	11.0	15.5
22				30.5	16.0	21.5	25.5	16.5	19.5	23.5	11.5	15.5
23				29.5	16.0	21.5	29.5	15.0	20.0	24.5	11.0	15.5
24				27.5	16.0	20.0	30.5	16.0	20.5	23.0	10.0	15.0
25				29.0	15.5	20.0	22.5	15.0	18.0	18.5	12.0	15.0
26				29.0	16.5	20.0	26.5	13.5	18.5	21.0	14.0	16.0
27				26.5	17.5	21.0	25.5	13.5	18.0	16.5	9.5	13.0
28				23.5	17.0	18.5	25.5	14.0	18.5	13.5	9.0	10.5
29				28.0	17.0	20.5	25.0	14.5	18.5	15.0	8.5	11.0
30				30.5	15.0	20.5	27.5	14.0	18.5	15.5	9.0	12.0
31				30.0	14.0	20.5	25.0	11.5	17.0	---	---	---
MONTH				30.5	9.5	18.5	31.5	11.5	19.5	27.5	8.5	15.0
YEAR	31.5	.0	17.0									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306052 SCANDARD GULCH AT MOUTH, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394851 LONGITUDE 1081435 DRAINAGE AREA 7.97 DATUM 6434.00 STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1			.59			.00			.00			.00
2			.00			.00			.00			.00
3			1.2			.00			.00			.00
4			.00			.00			.00			.00
5			.00			.00			.00			.00
6			.00			.00			.00			.00
7			.00			.00			.00			.00
8			.00			.00			.00			.00
9			.00			.00			.00			.00
10			.00			.00			.00			.00
11			.00			.00			.00			.00
12			.00			.00			.00			.00
13			.00			.00			.00			.00
14			.00			.00			.00			.00
15			.00			.00			.00			.00
16			.00			.00			.00			.00
17			.00			.00			.00			.00
18			.00			.00			.00			.00
19			.00			.00			.00			.00
20			.00			.00			.00			.00
21			.00			.00			.00			.00
22			.00			.00			.00			.00
23			.00			.00			.00			.00
24			.00			.00			.00			.00
25			.00			.00			.00			.00
26			.00			.00			.00			.00
27			.00			.00			.00			.00
28			.00			.00			.00			.00
29			.00			.00			.00			.00
30			.00			.00			.00			.00
31			.00						.00			.00
MONTH			.06			.00			.00			.00

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY   PROCESS DATE IS 10-31-83

STATION NUMBER   09306052   SCANDARD GULCH AT MOUTH, NEAR RIO BLANCO, CO.   STREAM   SOURCE AGENCY USGS
LATITUDE   394851   LONGITUDE   1081435   DRAINAGE AREA   7.97   DATUM   6434.00   STATE 08   COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1			.00			.00			.00			.00
2			.00			.00			.00			.00
3			.00			.00			.00			.00
4			.00			.00			.00			.00
5			.00			.00			.00			.00
6			.00			.00			.00			.00
7			.00			.00			.00			.00
8			.00			.00			.00			.00
9			.00			.00			.00			.00
10			.00			.00			.00			.00
11			.00			.00			.00			.00
12			.00			.00			.00			.00
13			.00			.00			.00			.00
14			.00			.00			.00			.00
15			.00			.00			.00			.00
16			.00			.00			.00			.00
17			.00			.00			.00			.00
18			.00			.00			.00			.00
19			.00			.00			.00			.00
20			1.6			.00			.00			.00
21			.59			.00			.00			.00
22			1.0			.00			.00			.00
23			.59			.00			.00			.00
24			.00			.00			.00			.00
25			.00			.00			.00			.00
26			.00			.00			.00			.00
27			.00			.00			.00			.00
28			.00			.00			.00			.00
29						.00			.00			.00
30						.00			.00			.00
31						.00						.00
MONTH			.14			.00			.00			.00

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY   PROCESS DATE IS 10-31-83

STATION NUMBER   09306052   SCANDARD GULCH AT MOUTH, NEAR RIO BLANCO, CO.   STREAM   SOURCE AGENCY USGS
LATITUDE 394851   LONGITUDE 1081435   DRAINAGE AREA   7.97   DATUM 6434.00   STATE 08   COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1			.00			.00			.00			.00
2			.00			.00			.00			.00
3			.00			.00			.00			.00
4			.00			.00			.00			.00
5			.00			.00			.00			.00
6			.00			.00			.00			.00
7			.00			.00			.00			.00
8			.00			.00			.00			.00
9			.00			.00			.00			.00
10			.00			.00			.00			.00
11			.00			.00			.00			.00
12			.00			.00			.00			.00
13			.00			.00			.00			.00
14			.00			.00			.00			.00
15			.00			.00			.00			.00
16			.00			.00			.00			.00
17			.00			.00			.00			.00
18			.00			.00			.00			.00
19			.00			.00			.00			.00
20			.00			.00			.00			.00
21			.00			.00			.00			.00
22			.00			.00			.00			.00
23			.00			.00			.00			.00
24			.00			.00			.00			.00
25			.00			.00			.00			.00
26			.00			.00			.00			.00
27			.00			.00			.00			.00
28			.00			.00			.00			.00
29			.00			.00			.00			.00
30			.00			.00			.00			.00
31						.00			.00			
MONTH			.00			.00			.00			.00
YEAR	---	---	.02									

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                        UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY           PROCESS DATE IS 10-31-83

STATION NUMBER   09306052        SCANDARD GULCH AT MOUTH, NEAR RIO BLANCO, CO.        STREAM    SOURCE AGENCY USGS
LATITUDE  394851     LONGITUDE  1081435        DRAINAGE AREA        7.97   DATUM  6434.00  STATE 08  COUNTY 103

                     DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY       MAX     MIN    MEAN        MAX     MIN    MEAN        MAX     MIN    MEAN        MAX     MIN    MEAN

                OCTOBER                    NOVEMBER                    DECEMBER                    JANUARY

  1                                                  ---
  2                                                  ---
  3                                                  ---
  4                                                  ---
  5                                                  ---

  6                                                  ---
  7                                                  ---
  8                                                  ---
  9                                                  .00
 10                                                  .00

 11                                                  .00
 12                                                  .00
 13                                                  .00
 14                                                  .00
 15                                                  .00

 16                                                  .00
 17                                                  ---
 18                                                  ---
 19                                                  ---
 20                                                  ---

 21                                                  ---
 22                                                  ---
 23                                                  ---
 24                                                  ---
 25                                                  ---

 26                                                  ---
 27                                                  ---
 28                                                  ---
 29                                                  ---
 30                                                  ---
 31

MONTH                                                .00
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UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306052 SCANDARD GULCH AT MOUTH, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394851 LONGITUDE 1081435 DRAINAGE AREA 7.97 DATUM 6434.00 STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
MONTH												

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306052 SCANDARD GULCH AT MOUTH, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 394851 LONGITUDE 1081435 DRAINAGE AREA 7.97 DATUM 6434.00 STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
MONTH												
YEAR	---	---	.00									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306058 WILLOW CREEK NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395014 LONGITUDE 1081437 DRAINAGE AREA 48.40 DATUM 6273.00 STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1			1.2			1.4			1.2			.90
2			1.2			1.4			1.4			.90
3			1.4			1.4			1.5			.80
4			1.4			1.4			1.4			.78
5			1.6			1.4			1.4			.40
6			1.3			1.4			1.4			1.1
7			1.2			1.4			1.4			1.1
8			1.4			1.4			1.4			1.8
9			1.4			1.4			1.4			1.5
10			1.3			1.4			1.4			1.4
11			1.3			1.4			1.4			1.7
12			1.4			1.4			1.4			1.9
13			1.4			1.5			1.4			1.9
14			1.4			1.4			1.4			1.9
15			1.5			1.5			1.4			1.9
16			1.6			1.4			1.4			1.9
17			1.3			1.4			1.4			2.0
18			1.4			1.5			1.3			1.9
19			1.3			1.4			1.6			1.9
20			1.3			1.4			1.6			2.0
21			1.4			1.5			1.6			2.0
22			1.3			1.5			1.5			2.1
23			1.3			1.5			1.0			1.8
24			1.4			1.5			1.2			2.2
25			1.4			1.5			1.2			2.2
26			1.3			1.3			1.2			2.5
27			1.3			1.4			1.3			2.2
28			1.3			1.4			1.2			2.3
29			1.5			1.4			1.2			2.1
30			1.4			1.3			1.2			2.0
31			1.2						1.0			2.1
MONTH			1.4			1.4			1.4			1.7

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306058 WILLOW CREEK NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395014 LONGITUDE 1081437 DRAINAGE AREA 48.40 DATUM 6273.00 STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1			2.2			3.1			2.9			2.5
2			2.2			3.0			2.9			2.5
3			2.1			3.0			2.9			2.5
4			2.0			2.9			2.9			1.4
5			2.0			2.7			2.9			.19
6			2.0			2.5			2.8			.15
7			2.0			2.5			2.9			.11
8			2.2			2.5			2.5			.18
9			2.5			2.5			2.7			.38
10			2.7			2.8			2.8			.15
11			2.7			2.8			2.9			.08
12			2.8			2.9			2.9			.18
13			2.8			2.9			2.9			.27
14			2.8			3.0			2.9			.07
15			3.0			3.0			2.9			.18
16			3.2			3.0			2.9			.12
17			3.7			3.0			2.8			.05
18			3.7			3.0			2.9			.12
19			4.0			3.0			2.9			.03
20			4.4			2.9			2.5			.05
21			4.4			2.9			2.5			.04
22			4.5			3.0			2.8			.04
23			4.1			3.0			2.8			.03
24			3.7			3.0			2.5			.04
25			3.5			2.9			2.5			.04
26			3.5			3.0			2.5			.08
27			3.4			3.0			2.6			.14
28			3.2			2.9			2.5			.10
29						2.9			2.5			.23
30						2.8			2.5			.32
31						2.9						.23
MONTH			3.1			2.9			2.8			.40

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306058 WILLOW CREEK NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395014 LONGITUDE 1081437 DRAINAGE AREA 48.40 DATUM 6273.00 STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1			.81			.62			.08			.73
2			1.0			.43			.32			.73
3			1.1			.50			.38			.72
4			1.5			.78			.36			.70
5			1.8			.81			.40			.74
6			.88			.88			.43			.70
7			.40			.81			.48			.68
8			.38			.88			.50			.71
9			.23			.88			.56			.75
10			.22			.88			.59			.75
11			.43			.96			.59			1.0
12			.78			1.0			.71			.89
13			.88			.38			.71			1.1
14			.88			.15			.71			.96
15			.81			.15			.65			.87
16			.62			.13			.65			.75
17			.96			.13			.74			.74
18			1.0			.13			.74			.76
19			.96			.12			.72			.96
20			.68			.12			.68			.93
21			.62			.11			.67			.96
22			1.2			.10			.68			1.1
23			1.1			.10			.69			1.0
24			.10			.11			.75			1.0
25			.13			.11			.68			1.0
26			.14			.10			.74			1.1
27			.17			.14			.78			1.1
28			.34			.15			.79			1.2
29			.34			.11			.84			1.2
30			.40			.09			.79			1.1
31						.08			.76			
MONTH			.70			.39			.62			.90
YEAR	---	---	1.5									

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY   PROCESS DATE IS 10-31-83

STATION NUMBER 09306058   WILLOW CREEK NEAR RIO BLANCO, CO.   STREAM   SOURCE AGENCY USGS
LATITUDE 395014   LONGITUDE 1081437   DRAINAGE AREA 48.40   DATUM 6273.00   STATE 08 COUNTY 103

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1			.03			.05			.10			.05
2			.03			.07			.10			.03
3			.03			.10			.10			.05
4			.04			.12			.25			.01
5			.04			.14			.20			.05
6			.04			.22			.17			.21
7			.04			.08			.20			.20
8			.04			.17			.16			.20
9			.04			.14			.10			.20
10			.04			.14			.06			.20
11			.04			.11			.10			.20
12			.04			.20			.11			.20
13			.04			.19			.10			.20
14			.04			20			.07			.20
15			.04			.10			.10			.20
16			.04			.08			.08			.25
17			.01			.04			.09			.25
18			.01			.04			.10			.30
19			.01			.10			.03			.30
20			.01			.10			.05			.33
21			.01			.04			.03			.30
22			.01			.04			.05			.30
23			.01			.04			.03			.35
24			.01			.02			.05			.64
25			.01			.05			.05			.60
26			.01			.05			.03			.70
27			.01			.05			.05			.60
28			.01			.08			.02			.88
29			.02			.08			.02			.81
30			.02			.08			.04			.39
31			.01						.04			.40
MONTH			.03			.76			.09			.31

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306058 WILLOW CREEK NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395014 LONGITUDE 1081437 DRAINAGE AREA 48.40 DATUM 6273.00 STATE 08 COUNTY 103

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1			.45			1.5			1.5			1.0
2			.30			2.2			1.7			1.0
3			.21			1.7			1.5			1.0
4			.50			1.1			1.5			.40
5			.50			1.0			1.5			.05
6			.50			1.0			1.5			.00
7			.30			1.0			1.5			.00
8			.50			1.0			1.5			.07
9			.27			1.0			1.5			.17
10			.30			1.0			1.5			.03
11			.30			1.0			1.5			.01
12			.30			1.0			1.5			.09
13			.30			1.5			1.5			.08
14			.50			1.5			1.5			.00
15			.80			1.5			1.5			.01
16			1.0			2.0			1.5			.01
17			1.5			1.2			1.5			.00
18			2.0			1.0			1.5			.02
19			2.4			.90			1.5			.00
20			2.5			.88			1.5			.00
21			2.3			1.0			1.5			.00
22			1.2			1.5			1.5			.00
23			1.3			1.5			1.5			.00
24			1.5			1.9			1.5			.00
25			.90			2.0			1.5			.00
26			.92			2.0			1.5			.00
27			.90			2.0			1.0			.01
28			.90			1.8			1.0			.01
29						1.5			1.0			.01
30						1.5			1.0			.01
31						---						.01
MONTH			.91			1.4			1.4			.13

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY   PROCESS DATE IS 10-31-83

STATION NUMBER 09306058   WILLOW CREEK NEAR RIO BLANCO, CO.   STREAM   SOURCE AGENCY USGS
LATITUDE 395014   LONGITUDE 1081437   DRAINAGE AREA 48.40   DATUM 6273.00   STATE 08 COUNTY 103

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1			.03			.05			.00			.02
2			.03			.08			.07			.02
3			.03			.09			.01			.02
4			.08			.06			.01			.02
5			.04			.06			.02			.02
6			.15			.06			.02			.02
7			.03			.06			.02			.02
8			.03			.07			.02			.02
9			.03			.08			.02			.02
10			.02			.08			.02			.02
11			.06			.09			.02			.04
12			.11			.15			.02			.03
13			.06			.05			.02			.04
14			.10			.03			.02			.04
15			.10			.03			.02			.03
16			.09			.03			.02			.03
17			.10			.03			.03			.04
18			.18			.03			.04			.05
19			.20			.03			.04			.09
20			.20			.01			.04			.08
21			.25			.01			.04			.11
22			.28			.01			.03			.08
23			.34			.00			.03			.07
24			.01			.00			.04			.06
25			.00			.00			.04			.05
26			.01			.00			.04			.04
27			.01			.04			.06			.02
28			.03			.02			.04			.03
29			.04			.00			.04			.04
30			.05			.00			.03			.04
31						.00			.03			
MONTH			.09			.04			.03			.04
YEAR	---	---	.43									

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306058 WILLOW CREEK NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395014 LONGITUDE 1081437 DRAINAGE AREA 48.40 DATUM 6273.00 STATE 08 COUNTY 103

SEDIMENT, SUSPENDED CONCENTRATION (MG/L), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1			10			---			---			---
2			---			---			---			11
3			---			---			---			---
4			---			33			65			5
5			---			36			---			49
6			---			58			45			70
7			---			21			---			---
8			---			44			42			---
9			---			36			---			---
10			---			37			15			---
11			---			28			---			---
12			---			54			28			---
13			---			48			---			---
14			---			---			18			---
15			11			---			---			---
16			---			---			20			---
17			---			12			25			---
18			---			---			---			---
19			2			---			7			---
20			---			---			---			62
21			---			---			8			---
22			---			---			---			---
23			---			---			10			71
24			---			5			---			107
25			---			---			---			---
26			---			---			8			---
27			---			---			---			---
28			---			---			6			142
29			---			---			6			142
30			---			---			13			72
31			---						16			---
MONTH			8			34			21			73

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306058 WILLOW CREEK NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395014 LONGITUDE 1081437 DRAINAGE AREA 48.40 DATUM 6273.00 STATE 08 COUNTY 103

SEDIMENT, SUSPENDED CONCENTRATION (MG/L), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1			75			---			---			---
2			---			269			217			---
3			37			214			---			---
4			---			135			---			---
5			---			140			188			---
6			---			---			200			10
7			---			---			---			---
8			---			---			---			101
9			---			---			---			166
10			---			---			---			60
11			---			---			---			---
12			---			---			---			89
13			---			---			---			106
14			---			---			---			---
15			---			---			---			---
16			---			250			---			---
17			---			---			---			12
18			200			---			---			58
19			210			---			---			14
20			205			113			---			15
21			181			---			---			---
22			87			184			---			---
23			114			---			---			---
24			142			233			---			---
25			---			---			---			---
26			97			246			---			---
27			---			---			---			---
28			---			236			---			---
29						---			---			---
30						---			---			---
31						---						---
MONTH			135			202			202			63

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                                   UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY          PROCESS DATE IS 10-31-83

STATION NUMBER   09306058       WILLOW CREEK NEAR RIO BLANCO, CO.                             STREAM    SOURCE AGENCY USGS
LATITUDE  395014     LONGITUDE  1081437          DRAINAGE AREA       48.40   DATUM  6273.00   STATE 08  COUNTY 103

                         SEDIMENT, SUSPENDED CONCENTRATION (MG/L), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY        MAX      MIN     MEAN          MAX      MIN     MEAN          MAX      MIN     MEAN          MAX      MIN     MEAN

                    JUNE                           JULY                           AUGUST                         SEPTEMBER

  1                          ---                            ---                              8                            ---
  2                          ---                            ---                             56                            ---
  3                          ---                             66                             14                            ---
  4                          ---                            ---                             15                            ---
  5                          ---                            ---                             20                            ---

  6                          ---                             26                             16                            ---
  7                          ---                            ---                            ---                            ---
  8                          ---                            ---                            ---                            ---
  9                          ---                             34                            ---                            ---
 10                           40                            ---                            ---                            ---

 11                          ---                            ---                             15                            ---
 12                           50                             55                             10                            ---
 13                          ---                            ---                            ---                            ---
 14                           40                             75                            ---                            ---
 15                          ---                            ---                            ---                             12

 16                           51                            ---                            ---                            ---
 17                          ---                            ---                            ---                            ---
 18                           66                            ---                             20                             26
 19                          ---                             86                            ---                             33
 20                          ---                            ---                            ---                            ---

 21                          ---                            ---                            ---                             41
 22                           87                            ---                             18                            ---
 23                          114                             17                            ---                            ---
 24                          ---                            ---                            ---                            ---
 25                           18                            ---                            ---                            ---

 26                          ---                             11                            ---                            ---
 27                          ---                             56                             30                              8
 28                          ---                             43                            ---                             10
 29                           49                              3                            ---                            ---
 30                          ---                            ---                             16                            ---
 31                                                         ---                            ---

MONTH                         57                             43                             20                             22

YEAR       ---      ---       67

NOTE:   NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR
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UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY   PROCESS DATE IS 10-31-83

STATION NUMBER 09306058   WILLOW CREEK NEAR RIO BLANCO, CO.   STREAM   SOURCE AGENCY USGS
LATITUDE 395014   LONGITUDE 1081437   DRAINAGE AREA 48.40   DATUM 6273.00   STATE 08 COUNTY 103

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	11.0	8.6	9.3	11.6	10.0	10.8	---	---	---	10.4	10.0	10.2
2	10.0	8.6	9.2	11.6	9.8	10.6	---	---	---	10.7	9.6	10.1
3	9.7	8.5	8.9	11.5	9.7	10.5	---	---	---	10.8	10.4	10.5
4	9.5	8.8	9.0	11.3	8.9	10.1	11.5	10.6	10.8	11.0	10.4	10.7
5	10.1	8.8	9.3	11.3	9.3	10.3	11.2	10.2	10.5	11.0	10.2	10.7
6	10.5	8.5	9.4	11.1	9.2	10.1	11.1	10.0	10.5	10.7	10.3	10.5
7	10.2	8.3	9.2	10.9	9.1	9.9	11.2	9.9	10.5	11.0	10.2	10.6
8	9.8	8.7	9.0	11.4	9.7	10.4	11.3	9.9	10.6	10.6	10.3	10.5
9	10.3	8.7	9.4	11.4	9.7	10.5	11.3	10.0	10.6	10.5	10.1	10.3
10	10.1	8.3	9.3	11.5	9.5	10.5	11.2	9.8	10.4	10.5	10.3	10.4
11	9.8	8.8	9.1	11.4	9.7	10.5	11.2	9.7	10.4	11.0	10.4	10.7
12	10.2	8.5	9.3	11.6	9.8	10.5	11.5	9.9	10.5	10.8	10.6	10.7
13	10.2	8.5	9.2	11.4	9.6	10.4	11.1	10.2	10.6	10.9	10.6	10.7
14	10.1	8.6	9.2	11.3	9.5	10.2	11.6	10.3	10.7	11.2	8.7	10.2
15	10.2	9.0	9.3	12.0	10.0	11.0	11.3	10.0	10.5	10.3	10.0	10.2
16	10.4	8.9	9.5	11.6	10.1	10.7	11.7	10.4	10.9	10.3	9.8	10.1
17	10.4	8.7	9.4	12.1	10.4	11.1	11.6	10.7	11.0	10.3	9.9	10.1
18	10.5	8.7	9.5	11.1	9.7	10.2	11.5	10.6	10.9	10.1	9.8	10.0
19	10.6	8.7	9.6	11.6	10.0	10.6	11.4	10.0	10.7	10.9	9.8	10.1
20	10.6	8.7	9.6	11.5	10.0	10.6	11.0	9.7	10.2	11.2	8.7	10.5
21	10.6	8.8	9.7	11.4	10.0	10.5	11.0	9.9	10.3	10.5	10.1	10.3
22	10.8	9.1	9.9	11.3	9.6	10.3	11.3	10.3	10.6	10.9	10.2	10.4
23	10.9	9.0	9.9	11.3	9.6	10.2	11.9	10.3	10.8	11.4	10.6	11.0
24	10.4	9.4	9.8	11.5	9.4	10.3	11.5	9.7	10.8	11.4	10.8	11.1
25	10.8	9.2	9.9	11.3	10.0	10.7	11.5	10.3	10.9	11.5	10.0	10.7
26	11.0	9.2	10.0	---	---	---	10.8	10.2	10.4	10.8	9.7	10.3
27	11.0	9.0	9.9	---	---	---	11.1	10.2	10.6	11.2	9.8	10.4
28	10.8	9.0	9.9	---	---	---	10.8	10.2	10.5	10.5	9.7	10.0
29	10.6	9.3	9.7	---	---	---	10.8	10.2	10.4	10.4	9.9	10.1
30	11.4	9.9	10.5	---	---	---	11.0	10.2	10.5	10.6	10.2	10.5
31	11.4	10.0	10.7	---	---	---	11.0	10.2	10.6	10.7	9.9	10.3
MONTH	11.4	8.3	9.5	12.1	8.9	10.5	11.9	9.7	10.6	11.5	8.7	10.4

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306058 WILLOW CREEK NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395014 LONGITUDE 1081437 DRAINAGE AREA 48.40 DATUM 6273.00 STATE 08 COUNTY 103

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	10.7	10.0	10.3									
2	10.6	10.0	10.3									
3	10.5	10.1	10.4									
4	10.5	10.2	10.4									
5	10.5	10.4	10.5									
6	10.8	10.5	10.6									
7	10.8	10.4	10.5									
8	11.5	10.5	11.1									
9	11.5	10.5	10.8									
10	10.8	10.4	10.5									
11	10.8	10.2	10.4									
12	11.2	10.4	10.7									
13	11.3	10.3	10.8									
14	10.9	10.3	10.7									
15	11.3	9.8	10.6									
16	10.2	9.8	10.1									
17	10.5	8.1	10.0									
18	10.8	9.4	10.1									
19	---	---	---									
20	---	---	---									
21	---	---	---									
22	---	---	---									
23	---	---	---									
24	---	---	---									
25	---	---	---									
26	---	---	---									
27	---	---	---									
28	---	---	---									
29	---	---	---									
30	---	---	---									
31	---	---	---									
MONTH	11.5	8.1	10.5									

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                                  UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY          PROCESS DATE IS 10-31-83

STATION NUMBER   09306058        WILLOW CREEK NEAR RIO BLANCO, CO.                           STREAM    SOURCE AGENCY USGS
LATITUDE  395014      LONGITUDE  1081437         DRAINAGE AREA        48.40   DATUM  6273.00  STATE 08  COUNTY 103

                              OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY        MAX      MIN     MEAN          MAX      MIN     MEAN          MAX      MIN     MEAN          MAX      MIN     MEAN

                    JUNE                           JULY                           AUGUST                          SEPTEMBER

  1
  2
  3
  4
  5

  6
  7
  8
  9
 10

 11
 12
 13
 14
 15

 16
 17
 18
 19
 20

 21
 22
 23
 24
 25

 26
 27
 28
 29
 30
 31

MONTH

YEAR      12.1      8.1     10.3

NOTE:    NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR
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UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306058 WILLOW CREEK NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395014 LONGITUDE 1081437 DRAINAGE AREA 48.40 DATUM 6273.00 STATE 08 COUNTY 103

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.7	8.2	8.5	8.4	8.2	8.2	---	---	---	8.4	8.3	8.3
2	8.6	8.4	8.5	8.3	8.2	8.2	---	---	---	8.4	8.3	8.3
3	8.5	8.4	8.5	8.4	8.2	8.2	---	---	---	8.4	8.3	8.3
4	8.5	8.4	8.4	---	---	---	8.3	8.2	8.3	8.4	8.3	8.3
5	8.5	8.4	8.4	---	---	---	8.3	8.3	8.3	8.4	8.3	8.3
6	8.5	8.3	8.4	---	---	---	8.4	8.3	8.3	8.3	8.3	8.3
7	8.4	8.3	8.4	---	---	---	8.4	8.3	8.3	8.3	8.2	8.2
8	8.4	8.3	8.4	---	---	---	8.4	8.3	8.3	8.3	8.1	8.2
9	8.4	8.3	8.4	---	---	---	8.4	8.3	8.3	8.3	8.2	8.2
10	8.4	8.3	8.3	---	---	---	8.4	8.3	8.3	8.3	8.3	8.3
11	8.4	8.3	8.3	---	---	---	8.4	8.3	8.3	8.3	8.2	8.3
12	8.3	8.3	8.3	---	---	---	8.4	8.3	8.3	8.3	8.3	8.3
13	8.3	8.2	8.3	---	---	---	8.4	8.3	8.3	8.3	8.3	8.3
14	8.3	8.2	8.2	---	---	---	8.4	8.3	8.3	8.3	8.3	8.3
15	8.4	8.2	8.2	---	---	---	8.4	8.3	8.3	8.3	8.3	8.3
16	8.3	8.1	8.1	---	---	---	8.4	8.3	8.3	8.3	8.3	8.3
17	8.2	8.1	8.1	8.5	8.5	8.5	8.4	8.3	8.3	8.4	8.3	8.3
18	8.3	8.1	8.2	8.6	8.4	8.5	8.4	8.3	8.3	8.4	8.3	8.3
19	8.4	8.2	8.2	8.6	8.4	8.5	8.4	8.3	8.3	8.3	8.3	8.3
20	8.4	8.2	8.3	8.6	8.4	8.4	8.4	8.3	8.3	8.4	8.3	8.4
21	8.4	8.2	8.3	8.5	8.3	8.4	8.4	8.3	8.3	8.4	8.3	8.3
22	8.4	8.2	8.3	8.4	8.3	8.3	8.4	8.3	8.3	8.3	8.3	8.3
23	8.4	8.2	8.3	8.4	8.3	8.3	8.4	8.2	8.3	8.4	8.3	8.3
24	8.3	8.2	8.2	8.4	8.2	8.3	8.3	8.1	8.2	8.4	8.3	8.3
25	8.3	8.2	8.2	8.4	8.2	8.3	8.4	8.3	8.3	8.4	8.3	8.3
26	8.4	8.2	8.3	8.3	8.2	8.3	8.3	8.2	8.3	8.4	8.3	8.4
27	8.4	8.2	8.3	8.3	8.2	8.2	8.4	8.2	8.3	8.4	8.3	8.4
28	8.4	8.2	8.3	8.2	8.2	8.2	8.3	8.2	8.2	8.4	8.3	8.4
29	8.3	8.2	8.3	8.2	8.2	8.2	8.3	8.2	8.2	8.5	8.3	8.4
30	8.5	8.2	8.3	8.2	8.1	8.1	8.4	8.2	8.3	8.4	8.4	8.4
31	8.4	8.1	8.3	---	---	---	8.4	8.3	8.3	8.4	8.4	8.4
MONTH	8.7	8.1	8.3	8.6	8.1	8.3	8.4	8.1	8.3	8.5	8.1	8.3

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306058 WILLOW CREEK NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395014 LONGITUDE 1081437 DRAINAGE AREA 48.40 DATUM 6273.00 STATE 08 COUNTY 103

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	8.4	8.4	8.4									
2	8.4	8.4	8.4									
3	8.5	8.4	8.4									
4	8.4	8.2	8.4									
5	8.4	8.3	8.3									
6	8.4	8.2	8.3									
7	8.4	8.3	8.3									
8	8.4	8.3	8.4									
9	8.5	8.3	8.4									
10	8.5	8.4	8.4									
11	8.5	8.4	8.4									
12	8.5	8.4	8.4									
13	8.5	8.4	8.4									
14	8.5	8.4	8.5									
15	8.5	8.4	8.5									
16	8.6	8.4	8.5									
17	8.6	8.3	8.5									
18	8.5	8.4	8.4									
19	---	---	---									
20	---	---	---									
21	---	---	---									
22	---	---	---									
23	---	---	---									
24	---	---	---									
25	---	---	---									
26	---	---	---									
27	---	---	---									
28	---	---	---									
29	---	---	---									
30	---	---	---									
31	---	---	---									
MONTH	8.6	8.2	8.4									

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306058 WILLOW CREEK NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395014 LONGITUDE 1081437 DRAINAGE AREA 48.40 DATUM 6273.00 STATE 08 COUNTY 103

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
MONTH												
YEAR	8.7	8.1	8.3									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY   PROCESS DATE IS 10-31-83

STATION NUMBER   09306058   WILLOW CREEK NEAR RIO BLANCO, CO.   STREAM   SOURCE AGENCY USGS
LATITUDE 395014   LONGITUDE 1081437   DRAINAGE AREA   48.40   DATUM 6273.00   STATE 08   COUNTY 103

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	1340	1250	1280	1340	1240	1290	---	---	---	1250	1180	1220
2	1330	1270	1300	1320	1250	1290	---	---	---	1300	1190	1250
3	1310	1260	1290	1320	1260	1290	---	---	---	1290	1230	1260
4	1320	1230	1280	1320	1250	1270	1310	1230	1260	1370	1270	1330
5	1340	1240	1310	1300	1230	1270	1260	1230	1240	1340	1290	1320
6	1360	1270	1320	1280	1210	1240	1260	1190	1230	1370	1300	1330
7	1340	1260	1300	1250	1210	1230	1260	1190	1230	1470	1260	1360
8	1320	1260	1280	1250	1210	1230	1250	1190	1220	1410	1310	1360
9	1360	1310	1330	1270	1220	1240	1260	1180	1220	1330	1250	1300
10	1350	1270	1310	1320	1240	1260	1220	1170	1200	1320	1230	1280
11	1320	1220	1290	1280	1230	1250	1220	1170	1200	1260	1210	1240
12	1320	1260	1300	1270	1220	1250	1220	1150	1190	1260	1210	1230
13	1320	1250	1290	1270	1220	1240	1210	1170	1180	1260	1220	1240
14	1310	1260	1290	1260	1220	1240	1210	1090	1180	1270	1210	1240
15	1320	1180	1260	1270	1220	1240	1200	1140	1170	1270	1220	1240
16	1320	1220	1300	1380	1210	1250	1230	1160	1200	1250	1210	1230
17	1320	1260	1290	1320	1250	1280	1260	1160	1210	1260	1200	1240
18	1320	1250	1280	1310	1230	1290	1360	1190	1270	1250	1220	1240
19	1310	1240	1280	1350	1270	1310	1220	1180	1200	1260	1220	1240
20	1310	1250	1280	1350	1250	1300	1230	1160	1200	1260	1220	1240
21	1310	1240	1280	1310	1280	1290	1210	1170	1200	1260	1210	1230
22	1310	1250	1280	1310	1270	1290	1260	1190	1220	1260	1200	1230
23	1300	1250	1280	1300	1260	1280	1350	1250	1290	1320	1220	1260
24	1300	1260	1280	1300	1270	1280	1410	1330	1360	1240	1160	1210
25	1300	1250	1280	1340	1280	1310	1350	1240	1290	1260	1190	1220
26	1310	1240	1280	1360	1260	1310	1410	1260	1320	1240	1030	1150
27	1300	1240	1270	1270	1170	1200	1270	1200	1240	1230	1070	1190
28	1300	1240	1270	1190	1180	1190	1360	1260	1320	1280	1100	1200
29	1280	1240	1260	1210	1190	1200	1330	1220	1290	1240	1140	1210
30	1270	1190	1230	1250	1210	1230	1230	1160	1200	1310	1190	1250
31	1310	1230	1280	---	---	---	1270	1200	1240	1260	1180	1230
MONTH	1360	1180	1290	1380	1170	1260	1410	1090	1230	1470	1030	1250

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306058 WILLOW CREEK NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395014 LONGITUDE 1081437 DRAINAGE AREA 48.40 DATUM 6273.00 STATE 08 COUNTY 103

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1240	1200	1220	---	---	---	---	---	---	1250	1170	1210
2	1270	1200	1230	---	---	---	---	---	---	---	---	---
3	1260	1180	1230	---	---	---	---	---	---	---	---	---
4	1370	1250	1310	---	---	---	---	---	---	---	---	---
5	1390	1320	1350	1230	1200	1210	---	---	---	---	---	---
6	1420	1290	1350	1240	1210	1220	1210	1170	1190	1280	1200	1240
7	1320	1210	1270	1250	1200	1220	1220	1150	1190	1280	1210	1240
8	1260	1190	1230	1240	1200	1220	1240	1140	1190	1320	1130	1220
9	1300	1200	1250	1240	1190	1220	1240	1180	1200	1130	1020	1070
10	1240	1170	1200	1240	1180	1220	1230	1170	1200	1140	1090	1120
11	1240	1170	1200	1230	1140	1200	1230	1150	1200	1150	1070	1110
12	1270	1160	1240	1220	1170	1200	1220	1160	1200	1170	910	1080
13	1290	1160	1210	1230	1210	1220	1230	1170	1200	1130	990	1050
14	1210	1140	1180	---	---	---	1230	1150	1200	1230	1120	1170
15	1480	984	1150	---	---	---	1230	1180	1210	1250	1210	1240
16	1220	924	1110	---	---	---	1230	1170	1200	1310	1240	1260
17	1200	630	1030	---	---	---	1240	1140	1180	1300	1210	1260
18	1250	892	1110	---	---	---	1190	1130	1160	1300	1240	1270
19	---	---	---	---	---	---	1180	1130	1160	1290	1170	1250
20	---	---	---	---	---	---	1240	1180	1210	1290	1190	1250
21	---	---	---	---	---	---	1280	1110	1170	1290	1220	1260
22	---	---	---	---	---	---	1230	1100	1160	1280	1130	1210
23	---	---	---	---	---	---	1240	1200	1220	1260	1120	1170
24	---	---	---	---	---	---	1250	1180	1200	1200	1140	1170
25	---	---	---	---	---	---	1240	1190	1210	1200	1170	1180
26	---	---	---	---	---	---	1250	1170	1210	---	---	---
27	---	---	---	---	---	---	1250	1190	1220	---	---	---
28	---	---	---	---	---	---	1250	1180	1220	---	---	---
29	---	---	---	---	---	---	1240	1190	1220	---	---	---
30	---	---	---	---	---	---	1260	1180	1210	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	1480	630	1220	1250	1140	1210	1280	1100	1200	1320	910	1190

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306058 WILLOW CREEK NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395014 LONGITUDE 1081437 DRAINAGE AREA 48.40 DATUM 6273.00 STATE 08 COUNTY 103

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	1320	1250	1290	1350	1290	1300
2	---	---	---	---	---	---	1370	1150	1300	---	---	---
3	---	---	---	---	---	---	1360	1320	1350	1310	1290	1310
4	---	---	---	---	---	---	1320	1270	1310	1310	1280	1300
5	---	---	---	---	---	---	1310	1270	1300	1310	1240	1290
6	---	---	---	---	---	---	1320	1260	1290	1310	1270	1300
7	---	---	---	---	---	---	1320	1260	1290	---	---	---
8	---	---	---	---	---	---	1320	1250	1290	---	---	---
9	---	---	---	---	---	---	1310	1250	1290	---	---	---
10	1440	1340	1400	---	---	---	1310	1240	1280	1300	1220	1280
11	1640	1350	1400	---	---	---	1310	1230	1280	1290	1150	1220
12	1380	1330	1350	1300	1280	1290	1300	1220	1280	1290	1240	1270
13	1360	1320	1340	1330	1270	1300	1320	1200	1270	1260	1210	1250
14	1390	1240	1340	1330	1300	1320	1320	1240	1290	1280	1250	1270
15	---	---	---	1330	1300	1320	1310	1240	1290	1310	1250	1270
16	---	---	---	1330	1300	1320	1310	1250	1290	1310	1300	1310
17	---	---	---	1330	1290	1310	1320	1210	1280	1310	1290	1300
18	---	---	---	1330	1280	1310	1330	1270	1310	1310	1270	1290
19	---	---	---	1320	1270	1310	1330	1260	1300	1300	1180	1260
20	---	---	---	1320	1270	1300	1320	1270	1300	1300	1250	1280
21	---	---	---	1320	1270	1300	1320	1250	1300	1370	1280	1300
22	---	---	---	1320	1260	1300	1320	1290	1310	1290	1270	1280
23	---	---	---	1320	1260	1300	1320	1270	1310	1280	1270	1270
24	---	---	---	1320	1240	1290	1320	1260	1300	1280	1260	1270
25	---	---	---	1320	1250	1290	1310	1270	1290	1270	1260	1260
26	---	---	---	1310	1250	1290	1320	1280	1300	1280	1250	1260
27	---	---	---	1330	1060	1270	1330	1300	1320	1270	1200	1240
28	---	---	---	1350	1110	1280	1330	1290	1310	1260	1160	1240
29	---	---	---	1320	1260	1290	1320	1300	1310	1270	1220	1260
30	---	---	---	1310	1250	1290	1320	1290	1300	1270	1220	1250
31	---	---	---	1430	1250	1290	1310	1300	1310	---	---	---
MONTH	1640	1240	1370	1430	1060	1300	1370	1150	1300	1370	1150	1270
YEAR	1640	630	1250									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306058 WILLOW CREEK NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395014 LONGITUDE 1081437 DRAINAGE AREA 48.40 DATUM 6273.00 STATE 08 COUNTY 103

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	14.0	5.0	9.5	6.0	.0	2.5	---	---	---	2.5	.0	1.0
2	11.5	8.0	9.5	7.5	.5	3.5	---	---	---	2.0	.0	.0
3	13.0	9.0	10.0	8.0	1.0	4.0	---	---	---	.0	.0	.0
4	9.5	8.0	9.0	8.5	3.5	6.0	1.5	.0	1.0	.5	.0	.0
5	11.5	7.5	9.0	8.5	1.5	4.5	4.5	.5	2.5	3.0	.0	1.5
6	13.5	5.0	8.5	8.0	2.0	5.0	4.5	.0	2.0	1.5	.0	.5
7	13.5	5.5	9.0	8.5	4.5	6.0	5.5	.0	2.5	1.5	.0	.5
8	9.5	8.0	8.5	7.5	2.0	4.5	5.5	.0	2.5	.0	.0	.0
9	10.5	6.0	8.0	7.5	.5	3.5	4.5	.0	2.0	.0	.0	.0
10	12.5	6.0	8.5	6.5	.5	3.0	6.5	1.0	3.0	1.5	.0	.5
11	9.5	6.5	8.0	7.0	.0	3.0	6.0	1.5	3.5	1.0	.0	.5
12	11.0	5.0	7.5	7.0	.5	3.5	5.0	.0	2.5	1.5	.0	.5
13	11.0	5.0	7.5	8.5	2.0	5.0	3.5	1.5	2.0	1.5	.5	1.0
14	10.5	6.5	8.0	8.5	4.0	5.5	3.5	.0	1.5	1.5	.0	1.0
15	7.0	5.5	6.5	7.5	3.5	5.5	5.0	1.5	3.0	2.0	.0	1.0
16	8.5	4.5	6.5	8.5	2.5	5.0	2.0	.0	.5	3.5	.5	1.5
17	9.5	5.0	7.0	7.0	1.5	4.0	1.5	.0	.0	3.0	1.0	2.0
18	10.5	3.5	6.5	4.5	2.0	3.5	.0	.0	.0	3.0	1.5	2.0
19	10.0	2.5	5.5	3.5	.0	1.5	3.5	.0	2.0	3.5	.5	2.0
20	10.5	2.5	6.0	2.5	.0	1.0	6.0	2.0	3.5	3.5	.5	2.0
21	9.5	2.0	5.5	4.5	.0	2.5	3.0	1.0	2.5	1.5	.5	1.0
22	8.5	1.5	4.5	6.0	1.5	4.0	1.5	.0	.5	2.0	.0	1.0
23	8.5	1.0	4.5	7.0	3.5	4.5	.0	.0	.0	1.0	.0	.5
24	5.5	4.0	4.5	7.5	2.5	4.5	4.5	.0	1.0	2.5	.5	1.5
25	8.5	3.0	5.0	3.5	.0	1.5	.0	.0	.0	4.0	.5	2.0
26	9.0	2.0	5.0	.0	.0	.0	.0	.0	.0	5.0	2.0	3.0
27	10.0	3.0	6.0	.0	.0	.0	.0	.0	.0	5.0	1.5	2.5
28	9.0	3.5	6.0	.0	.0	.0	1.5	.0	.5	4.5	.0	2.0
29	7.5	4.0	6.5	.0	.0	.0	.0	.0	.0	3.5	1.0	2.5
30	5.0	1.5	3.0	.0	.0	.0	1.5	.0	.0	2.5	.0	1.0
31	5.0	.0	2.0	---	---	---	1.5	.0	.5	3.5	.0	1.5
MONTH	14.0	.0	7.0	8.5	.0	3.0	6.5	.0	1.5	5.0	.0	1.0

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306058 WILLOW CREEK NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395014 LONGITUDE 1081437 DRAINAGE AREA 48.40 DATUM 6273.00 STATE 08 COUNTY 103

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	3.0	.5	1.5	---	---	---	9.5	4.0	6.0	14.5	7.0	10.5
2	3.5	.0	1.5	---	---	---	9.5	2.0	5.5	14.5	7.0	11.0
3	2.0	.0	1.0	---	---	---	11.5	2.0	6.5	---	---	---
4	.5	.0	.0	---	---	---	10.5	3.5	6.5	---	---	---
5	.0	.0	.0	7.0	.5	3.5	9.5	1.0	5.0	---	---	---
6	.0	.0	.0	9.5	.0	3.0	10.5	3.5	6.0	19.5	5.0	13.5
7	.0	.0	.0	10.5	1.5	5.0	5.5	.0	3.0	15.5	2.5	8.5
8	1.0	.0	.5	9.0	1.0	4.0	9.5	.0	3.5	18.5	6.5	11.0
9	1.0	.0	.0	10.0	.5	5.0	14.0	.0	5.5	18.0	7.0	11.0
10	1.5	.0	.5	8.0	2.5	5.0	14.5	.0	6.0	16.5	5.5	10.0
11	2.5	.5	1.0	10.0	3.5	6.0	14.5	3.5	8.5	17.0	4.5	9.5
12	2.5	.0	1.0	12.0	4.0	6.5	12.5	6.0	9.0	7.0	1.0	4.0
13	4.0	.5	2.0	13.5	.5	6.0	18.0	3.5	10.0	16.5	2.5	7.5
14	4.5	2.5	3.0	9.5	2.0	5.5	18.0	2.5	9.5	19.0	5.0	10.0
15	5.0	2.5	3.5	11.0	4.5	7.0	14.5	2.5	7.5	20.0	5.0	11.5
16	4.5	2.0	3.0	9.5	4.0	6.0	15.5	.5	7.0	25.0	5.0	12.5
17	6.0	1.5	3.0	10.5	2.5	6.0	17.0	.0	7.5	22.5	4.5	12.5
18	6.0	1.0	3.0	10.0	3.0	6.5	14.5	1.5	7.5	21.5	5.5	12.5
19	---	---	---	5.5	2.0	3.5	10.5	.0	4.5	19.5	6.5	12.0
20	---	---	---	6.5	1.0	3.5	6.0	.0	2.5	24.5	5.0	13.5
21	---	---	---	5.0	.5	2.5	13.5	.0	5.0	27.5	3.0	13.5
22	---	---	---	8.5	.5	3.5	17.0	.5	8.0	22.0	4.0	12.5
23	---	---	---	11.0	.0	5.0	12.5	4.0	7.5	27.5	6.0	15.0
24	---	---	---	12.0	1.0	6.0	17.5	3.5	10.0	23.5	5.5	13.0
25	---	---	---	12.0	1.5	6.5	14.5	4.5	9.5	26.5	4.5	13.0
26	---	---	---	7.0	4.5	6.0	13.0	5.0	8.5	---	---	---
27	---	---	---	9.5	4.5	6.5	14.5	6.0	9.5	---	---	---
28	---	---	---	10.5	4.0	7.0	18.5	4.0	10.5	---	---	---
29	---	---	---	7.0	4.0	4.5	14.5	5.0	9.5	---	---	---
30	---	---	---	6.0	1.5	3.5	15.5	3.5	9.5	---	---	---
31	---	---	---	10.5	1.0	5.0	---	---	---	---	---	---
MONTH	6.0	.0	1.5	13.5	.0	5.0	18.5	.0	7.0	27.5	1.0	11.5

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306058 WILLOW CREEK NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395014 LONGITUDE 1081437 DRAINAGE AREA 48.40 DATUM 6273.00 STATE 08 COUNTY 103

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	24.0	11.0	16.0	29.0	9.5	18.0	20.0	8.0	13.0
2	---	---	---	25.5	6.5	14.5	18.5	13.0	15.5	19.5	7.0	12.0
3	---	---	---	27.0	7.0	15.0	24.5	11.5	16.5	19.5	7.0	12.0
4	---	---	---	30.5	7.0	15.0	26.5	9.5	16.0	18.5	7.0	12.5
5	---	---	---	26.5	7.0	13.0	23.0	8.5	14.5	19.0	11.0	13.5
6	---	---	---	27.5	5.5	13.0	23.5	8.5	15.0	18.0	8.0	12.5
7	---	---	---	27.5	6.5	13.0	22.0	9.5	14.5	15.0	8.5	11.0
8	---	---	---	27.5	10.5	14.0	20.0	10.0	14.0	16.0	9.0	11.5
9	23.5	9.0	17.5	28.5	7.5	14.5	21.0	10.0	14.5	15.0	8.5	11.0
10	20.5	4.0	12.5	25.0	6.0	15.0	21.0	9.0	14.0	15.5	9.5	12.0
11	25.0	5.5	14.5	23.5	10.5	15.5	20.5	10.5	14.0	11.5	9.5	10.5
12	20.0	8.0	13.5	24.5	9.5	16.0	15.0	11.0	12.5	14.0	8.0	10.5
13	20.0	8.5	13.5	23.0	10.5	16.0	15.5	10.0	12.0	10.0	8.0	9.0
14	16.0	7.0	11.0	27.0	7.5	16.0	21.5	10.5	14.5	10.5	6.5	8.5
15	18.5	6.5	12.5	26.0	7.0	15.0	22.0	9.5	14.5	15.5	7.5	11.0
16	27.0	7.0	15.5	27.5	7.0	15.5	19.5	10.0	14.0	16.5	7.0	11.0
17	25.0	10.5	16.5	27.0	11.0	17.0	19.0	9.5	13.5	17.0	9.0	12.0
18	19.5	10.0	14.5	29.0	9.0	17.5	22.0	10.0	15.0	14.5	7.0	10.0
19	23.0	7.5	14.0	29.5	8.5	17.0	22.0	9.5	14.5	14.0	7.5	10.0
20	25.5	7.0	15.0	25.5	8.0	16.0	19.0	9.5	14.0	16.0	8.0	11.0
21	17.0	9.0	13.5	26.5	8.5	17.0	21.0	11.0	14.5	17.0	8.0	11.5
22	18.5	10.0	13.5	27.5	11.5	19.0	16.0	11.0	13.0	16.0	6.0	11.5
23	20.0	9.0	14.0	28.5	11.0	18.5	19.5	9.5	13.5	16.5	9.0	12.0
24	28.0	8.0	17.0	25.5	11.5	17.5	21.5	10.5	14.5	15.5	7.0	11.0
25	22.5	8.5	14.0	25.0	10.5	17.0	16.0	10.0	12.5	13.0	9.5	11.0
26	27.5	6.5	16.0	24.0	12.0	17.5	18.5	10.0	13.5	15.5	10.5	12.0
27	29.5	8.0	17.5	25.0	12.0	17.5	18.0	9.0	12.5	12.0	9.0	11.0
28	26.5	9.0	16.5	18.0	12.5	15.0	18.0	9.0	13.0	10.0	7.5	8.5
29	24.5	8.5	16.0	26.5	12.0	17.5	18.0	10.0	13.0	10.5	6.5	8.0
30	24.0	11.5	16.0	28.5	10.5	18.0	20.0	9.0	13.5	10.5	7.0	9.0
31	---	---	---	29.0	9.5	18.0	16.5	9.0	12.5	---	---	---
MONTH	29.5	4.0	15.0	30.5	5.5	16.0	29.0	8.5	14.0	20.0	6.0	11.0
YEAR	30.5	.0	8.0									

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                         UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY          PROCESS DATE IS 10-31-83

STATION NUMBER   09306061        PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO.    STREAM    SOURCE AGENCY USGS
LATITUDE  395102     LONGITUDE  1081530        DRAINAGE AREA      309.00  DATUM  6214.00   STATE 08  COUNTY 103

                    DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY       MAX     MIN     MEAN         MAX     MIN     MEAN         MAX     MIN     MEAN         MAX     MIN     MEAN

                OCTOBER                     NOVEMBER                     DECEMBER                      JANUARY

  1                        3.5                          9.9                          13                            12
  2                        3.8                         12                            11                            12
  3                        5.0                         12                            11                            12
  4                        6.2                         10                            11                            12
  5                        7.5                          9.8                          12                            12

  6                        6.3                          9.1                          12                            12
  7                        6.1                         12                            12                            12
  8                        6.7                         14                            12                            12
  9                        6.4                         14                            12                            12
 10                        6.0                         13                            12                            12

 11                        6.5                         12                            12                            12
 12                        7.2                         18                            12                            12
 13                        7.8                         20                            12                            11
 14                        7.6                         19                            11                            11
 15                        7.9                         18                            11                            10

 16                       10                           17                            11                             9.5
 17                        7.5                         15                            11                             9.7
 18                        7.5                         16                            12                             9.5
 19                        7.2                         16                            12                             9.5
 20                        6.8                         16                            12                             9.6

 21                        7.1                         17                            13                             9.2
 22                        7.0                         19                            12                             9.0
 23                        7.6                         18                            12                             9.0
 24                        7.7                         17                            12                             9.5
 25                        7.0                         17                            12                             9.0

 26                        6.4                         15                            12                            10
 27                        6.1                         14                            12                             9.9
 28                        5.9                         13                            12                            11
 29                        6.7                         13                            12                             9.2
 30                        9.5                         13                            12                            11
 31                        9.7                                                       12                            11

MONTH                      6.9                         15                            12                            11
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UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 0930606I PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395102 LONGITUDE 1081530 DRAINAGE AREA 309.00 DATUM 6214.00 STATE 08 COUNTY I03

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1			9.0			13			18			3.8
2			9.0			16			I8			3.6
3			9.0			29			17			5.I
4			9.0			24			17			6.1
5			9.0			21			17			8.5
6			9.0			16			17			6.6
7			9.0			17			18			4.I
8			9.0			15			18			3.0
9			9.0			I5			16			2.9
10			9.0			15			16			2.9
11			9.0			14			17			2.9
12			9.0			23			17			3.3
13			9.0			28			17			17
14			I0			34			13			20
15			II			42			16			10
16			I1			36			17			5.9
17			I4			27			12			6.5
I8			11			25			6.6			4.4
19			I4			24			6.8			6.4
20			2I			23			5.3			II
21			29			20			5.1			7.2
22			37			20			5.9			6.0
23			33			18			5.8			5.4
24			21			18			5.6			5.6
25			17			17			4.9			4.4
26			15			I5			4.9			4.0
27			I5			15			6.1			6.0
28			14			16			5.3			7.2
29						18			5.0			5.5
30						17			3.5			5.3
31						16						5.9
MONTH			14			21			12			6.3

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306061 PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395102 LONGITUDE 1081530 DRAINAGE AREA 309.00 DATUM 6214.00 STATE 08 COUNTY 103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1			5.2			3.3			6.7			12
2			4.8			3.2			6.9			12
3			4.0			3.1			8.4			11
4			3.1			2.9			7.6			11
5			3.2			3.2			12			12
6			3.3			3.3			11			14
7			3.3			3.4			12			12
8			3.4			3.7			12			12
9			3.6			4.8			13			16
10			4.0			5.0			13			17
11			5.6			4.3			19			21
12			3.8			4.6			23			20
13			3.4			4.5			31			21
14			4.9			6.4			20			22
15			4.9			6.8			17			21
16			4.7			6.6			15			19
17			4.8			6.5			15			17
18			5.0			7.0			19			17
19			4.8			7.0			15			17
20			5.0			6.5			13			16
21			5.5			6.5			13			15
22			5.6			5.9			13			15
23			5.4			5.4			15			14
24			5.1			5.4			13			13
25			4.2			6.1			13			14
26			3.7			6.1			13			15
27			3.9			7.4			13			15
28			3.8			14			12			16
29			3.5			11			14			16
30			3.3			9.7			15			17
31						7.1			14			
MONTH			4.3			5.8			14.			16
YEAR	---	---	11									

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306061 PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395102 LONGITUDE 1081530 DRAINAGE AREA 309.00 DATUM 6214.00 STATE 08 COUNTY 103

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1			.66			1.0			2.5			2.0
2			1.1			1.0			3.2			2.0
3			1.4			1.0			3.0			2.0
4			1.7			1.7			3.0			2.5
5			1.9			2.2			3.0			3.0
6			2.4			1.6			2.8			3.2
7			1.1			2.6			2.8			3.9
8			1.8			2.6			3.1			3.2
9			.92			2.1			2.7			3.1
10			.86			1.1			2.8			3.5
11			1.0			1.0			2.4			4.4
12			3.1			1.0			2.4			4.0
13			3.6			1.5			2.4			3.1
14			1.8			1.5			2.2			4.2
15			1.6			1.5			2.2			4.3
16			3.0			1.5			2.5			2.5
17			1.5			2.2			3.0			2.0
18			1.2			1.3			5.4			1.7
19			1.1			1.3			3.2			2.0
20			.81			1.3			3.4			2.0
21			.84			1.3			3.0			2.0
22			.28			1.4			4.0			2.9
23			.78			1.4			4.0			3.9
24			.60			1.4			4.0			3.5
25			.40			1.5			3.0			3.1
26			.35			1.5			3.0			3.8
27			.31			1.4			2.0			4.0
28			.30			1.0			1.5			4.1
29			---			1.0			1.5			3.0
30			.90			1.0			1.8			3.3
31			.90						2.0			2.8
MONTH			1.3			1.5			2.8			3.1

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306061 PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395102 LONGITUDE 1081530 DRAINAGE AREA 309.00 DATUM 6214.00 STATE 08 COUNTY 103

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1			2.5			7.0			10			3.0
2			2.5			9.9			10			3.0
3			2.9			34			10			4.0
4			3.1			23			10			4.0
5			1.9			15			10			5.0
6			2.0			9.1			10			3.4
7			2.2			10			10			3.0
8			2.2			14			10			2.0
9			4.4			10			10			2.0
10			3.4			8.9			10			2.0
11			5.1			9.0			10			2.0
12			4.1			30			10			3.0
13			4.9			40			11			20
14			4.2			48			9.0			25
15			6.4			67			15			8.0
16			4.8			44			20			3.0
17			5.3			27			8.1			2.7
18			2.9			20			5.0			1.0
19			9.6			15			5.0			1.2
20			21			15			5.0			3.7
21			49			12			5.0			2.3
22			98			12			5.0			1.5
23			54			10			5.0			1.2
24			30			11			4.0			2.0
25			11			10			4.0			1.5
26			10			10			4.0			1.5
27			8.0			10			5.0			2.0
28			7.7			10			4.0			2.0
29						10			4.0			1.0
30						10			2.0			1.0
31						10						1.1
MONTH			13			18			8.0			3.8

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306061 PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395102 LONGITUDE 1081530 DRAINAGE AREA 309.00 DATUM 6214.00 STATE 08 COUNTY 103

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1			1.0			.54			1.0			5.0
2			.70			.50			1.5			5.0
3			.40			.50			2.0			4.0
4			.30			.50			2.0			3.9
5			.30			.47			8.0			156
6			.30			.50			8.0			15
7			.30			.50			8.0			4.4
8			.30			.61			8.0			3.0
9			.30			.70			9.0			8.9
10			.67			.73			9.0			9.6
11			1.6			.70			20			21
12			.80			.81			250			20
13			.80			.80			450			20
14			.98			1.3			30			15
15			1.1			1.1			20			15
16			1.2			1.0			15			14
17			1.3			1.0			12			15
18			.86			2.0			41			12
19			.90			2.1			20			15
20			.89			1.0			15			20
21			.90			1.0			15			14
22			.90			.80			15			15
23			.60			.69			14			12
24			.50			.70			12			10
25			.47			.80			10			15
26			.50			.90			10			10
27			.70			2.7			10			9.0
28			.65			1000			8.0			8.0
29			.50			30			10			8.0
30			.50			5.0			10			8.2
31						3.0			7.4			
MONTH			.71			34			34			16
YEAR	---	---	11									

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306061 PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395102 LONGITUDE 1081530 DRAINAGE AREA 309.00 DATUM 6214.00 STATE 08 COUNTY 103

SEDIMENT, SUSPENDED CONCENTRATION (MG/L), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1			70			---			---			---
2			107			---			106			---
3			105			---			---			---
4			99			63			101			---
5			95			82			---			---
6			144			67			87			99
7			65			79			---			120
8			100			69			96			---
9			53			55			---			97
10			53			30			86			---
11			58			---			---			137
12			162			---			75			---
13			170			---			---			104
14			90			---			74			140
15			76			---			---			161
16			112			33			85			98
17			74			54			---			---
18			59			---			177			66
19			56			---			---			---
20			44			---			105			---
21			44			---			---			81
22			15			---			125			119
23			38			---			---			161
24			---			30			---			---
25			21			---			---			126
26			---			---			---			140
27			19			38			---			---
28			---			---			---			140
29			---			---			---			---
30			35			---			55			112
31			---						---			94
MONTH			76			55			98			117

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306061 PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395102 LONGITUDE 1081530 DRAINAGE AREA 309.00 DATUM 6214.00 STATE 08 COUNTY 103

SEDIMENT, SUSPENDED CONCENTRATION (MG/L), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1			---			---			---			---
2			105			230			---			---
3			119			430			---			---
4			126			350			---			---
5			77			---			---			220
6			---			210			---			190
7			91			---			---			---
8			91			344			---			---
9			182			---			---			---
10			140			220			---			---
11			210			---			---			---
12			168			490			---			---
13			203			530			247			---
14			154			520			269			---
15			217			590			---			---
16			161			450			430			---
17			140			370			250			160
18			98			---			---			---
19			221			231			---			70
20			273			---			---			140
21			469			---			---			120
22			830			220			---			---
23			557			---			---			82
24			---			220			---			132
25			246			---			---			---
26			---			---			---			---
27			---			---			---			---
28			204			---			---			100
29						---			---			---
30						---			---			---
31						---						66
MONTH			221			360			299			128

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306061 PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395102 LONGITUDE 1081530 DRAINAGE AREA 309.00 DATUM 6214.00 STATE 08 COUNTY 103

SEDIMENT, SUSPENDED CONCENTRATION (MG/L), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1			---			59			---			---
2			---			---			---			---
3			35			---			---			---
4			---			---			---			130
5			---			53			---			3260
6			---			---			---			---
7			---			---			---			135
8			---			60			---			92
9			28			---			---			187
10			55			53			---			210
11			95			---			---			364
12			---			65			---			---
13			---			---			---			---
14			68			75			---			---
15			80			62			---			260
16			---			---			---			277
17			90			---			300			---
18			64			---			750			250
19			---			114			500			---
20			62			---			---			462
21			---			---			---			358
22			---			---			---			---
23			38			48			340			296
24			---			---			---			---
25			40			---			---			389
26			---			54			---			---
27			---			82			---			---
28			62			---			---			---
29			---			---			---			---
30			---			---			---			179
31						---			195			
MONTH			60			66			417			457
YEAR	---	---	181									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306061 PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395102 LONGITUDE 1081530 DRAINAGE AREA 309.00 DATUM 6214.00 STATE 08 COUNTY 103

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	11.2	6.7	8.7	---	---	---	11.4	10.1	10.6	10.3	9.3	9.9
2	10.6	6.7	8.1	---	---	---	11.8	9.8	10.6	10.5	10.0	10.2
3	10.5	6.6	8.1	---	---	---	11.9	9.8	10.5	10.7	10.2	10.4
4	9.2	6.8	7.8	---	---	---	12.0	9.8	10.6	10.5	10.1	10.4
5	9.9	7.2	8.4	---	---	---	11.6	9.3	10.2	10.2	9.3	9.9
6	10.4	6.5	8.3	---	---	---	11.7	8.2	10.1	10.8	9.7	10.4
7	10.4	6.6	8.3	---	---	---	11.7	8.2	10.0	---	---	---
8	---	---	---	---	---	---	11.9	9.2	10.2	---	---	---
9	---	---	---	11.7	8.8	9.9	11.8	9.3	10.2	10.8	10.4	10.5
10	---	---	---	11.9	9.0	10.1	11.6	9.0	10.0	10.7	10.4	10.5
11	---	---	---	12.0	8.8	10.1	11.5	8.9	9.8	10.5	10.2	10.3
12	---	---	---	11.5	8.9	9.9	11.8	9.1	9.9	10.5	9.9	10.2
13	---	---	---	11.3	8.6	9.7	11.0	9.3	9.8	10.5	9.9	10.3
14	---	---	---	11.1	8.2	9.4	11.5	9.4	9.9	10.5	10.0	10.3
15	---	---	---	11.1	8.5	9.5	11.5	8.9	9.7	10.6	9.9	10.3
16	9.8	7.0	8.2	11.4	8.4	9.5	12.2	9.3	10.1	10.5	9.6	10.1
17	10.0	7.0	8.1	11.4	8.8	9.7	12.3	10.1	10.8	10.3	9.3	9.8
18	10.2	7.0	8.2	11.4	8.3	9.8	10.9	10.4	10.6	10.2	9.5	9.8
19	10.2	6.9	8.3	12.0	8.0	10.2	11.1	9.4	10.2	10.5	9.3	9.9
20	10.1	6.8	8.2	11.7	8.2	10.1	10.9	9.0	9.7	10.5	9.2	9.9
21	10.1	6.9	8.2	11.7	8.2	10.0	10.5	9.4	9.7	10.6	9.7	9.9
22	10.4	7.1	8.4	11.4	8.9	9.8	11.2	9.8	10.3	10.7	10.1	10.4
23	10.2	7.1	8.5	11.1	8.7	9.6	11.2	10.3	10.8	10.6	10.3	10.5
24	9.6	7.1	8.1	11.6	8.5	9.6	---	---	---	10.6	9.6	10.2
25	10.3	7.2	8.4	10.7	8.2	9.6	10.8	10.2	10.5	10.8	9.6	10.2
26	10.6	7.3	8.7	11.8	8.2	10.3	10.7	10.4	10.6	10.4	8.8	9.7
27	---	---	---	11.5	9.8	10.4	10.8	10.1	10.3	10.4	9.2	9.7
28	---	---	---	11.8	8.2	10.3	---	---	---	10.5	9.6	10.0
29	---	---	---	11.4	8.3	10.1	10.8	10.3	10.5	10.5	9.8	10.1
30	---	---	---	11.7	8.1	10.2	10.4	9.5	9.9	10.7	10.0	10.4
31	---	---	---	---	---	---	10.8	9.9	10.2	10.7	9.7	10.3
MONTH	11.2	6.5	8.3	12.0	8.0	9.9	12.3	8.2	10.2	10.8	8.8	10.2

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306061 PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395102 LONGITUDE 1081530 DRAINAGE AREA 309.00 DATUM 6214.00 STATE 08 COUNTY 103

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	10.8	9.9	10.3				---	---	---	---	---	---
2	10.7	9.8	10.3				---	---	---	---	---	---
3	10.5	10.1	10.3				---	---	---	---	---	---
4	10.4	10.0	10.2				---	---	---	---	---	---
5	---	---	---				---	---	---	---	---	---
6	---	---	---				---	---	---	10.1	6.7	8.6
7	10.4	9.9	10.1				---	---	---	10.4	6.5	8.6
8	10.7	10.0	10.2				---	---	---	11.5	6.3	8.6
9	10.4	10.1	10.2				9.8	7.6	8.6	11.6	6.0	8.6
10	10.4	10.2	10.3				9.9	7.3	8.6	11.3	6.6	9.4
11	10.3	10.1	10.2				9.2	7.2	8.2	---	---	---
12	10.4	10.2	10.3				8.8	7.6	8.1	9.8	6.6	8.7
13	---	---	---				9.2	6.9	8.1	8.3	6.6	7.4
14	---	---	---				9.2	6.6	8.0	7.8	6.5	7.0
15	---	---	---				8.7	7.0	7.8	8.2	5.8	7.1
16	---	---	---				8.9	6.9	7.8	8.0	5.7	6.9
17	---	---	---				8.9	6.1	7.7	8.7	5.8	7.3
18	---	---	---				---	---	---	9.8	5.7	7.6
19	---	---	---				---	---	---	9.8	6.0	7.5
20	---	---	---				---	---	---	8.8	5.7	7.3
21	---	---	---				---	---	---	10.0	5.5	7.7
22	---	---	---				---	---	---	10.1	5.4	7.7
23	---	---	---				---	---	---	11.4	5.1	7.9
24	---	---	---				---	---	---	10.4	5.4	7.5
25	---	---	---				---	---	---	10.5	5.2	7.5
26	---	---	---				---	---	---	10.4	5.1	7.4
27	---	---	---				---	---	---	9.7	5.3	7.2
28	---	---	---				---	---	---	8.4	5.6	6.9
29	---	---	---				---	---	---	8.8	5.3	7.0
30	---	---	---				---	---	---	8.8	5.5	6.9
31	---	---	---				---	---	---	---	---	---
MONTH	10.8	9.8	10.2				9.9	6.1	8.1	11.6	5.1	7.7

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306061 PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395102 LONGITUDE 1081530 DRAINAGE AREA 309.00 DATUM 6214.00 STATE 08 COUNTY 103

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---				8.8	6.5	7.6
2	---	---	---	11.4	5.5	8.5				9.0	6.5	7.7
3	---	---	---	10.7	5.0	7.9				9.0	6.4	7.7
4	---	---	---	10.0	4.9	7.5				8.7	6.5	7.5
5	---	---	---	9.4	5.3	7.1				8.7	7.2	7.3
6	---	---	---	---	---	---				8.9	6.8	7.6
7	---	---	---	---	---	---				8.8	7.2	7.2
8	---	---	---	---	---	---				8.8	7.0	7.7
9	10.7	6.2	8.1	---	---	---				9.1	7.0	7.8
10	10.4	6.3	8.2	---	---	---				8.8	7.0	7.7
11	10.0	6.2	8.1	---	---	---				7.9	7.1	7.5
12	9.9	6.4	8.1	9.4	5.6	7.4				8.2	7.3	7.7
13	10.5	6.4	8.3	9.6	6.1	7.4				8.4	7.7	8.0
14	9.7	6.8	7.8	9.3	5.6	7.3				8.6	7.8	8.1
15	10.1	6.3	8.2	9.0	5.4	7.3				8.6	7.0	7.9
16	10.8	6.0	8.3	9.2	5.4	7.3				8.8	7.0	7.8
17	10.0	6.0	7.8	9.6	5.4	7.3				8.4	6.9	7.7
18	9.0	6.1	7.5	9.5	5.2	7.0				8.6	7.1	7.7
19	9.5	6.0	7.7	9.6	5.1	7.1				8.6	7.0	7.7
20	10.1	5.5	7.7	---	---	---				8.4	6.7	7.5
21	9.3	5.5	7.1	---	---	---				8.9	7.0	7.8
22	9.6	5.4	6.9	---	---	---				8.9	7.0	7.9
23	---	---	---	---	---	---				8.8	6.8	7.8
24	---	---	---	---	---	---				9.0	7.0	8.0
25	11.6	6.6	8.6	---	---	---				8.5	7.4	7.8
26	13.5	5.7	9.3	---	---	---				8.3	6.9	7.6
27	12.0	5.6	8.4	---	---	---				8.1	7.1	7.5
28	10.9	5.1	7.9	---	---	---				8.6	7.6	7.9
29	---	---	---	---	---	---				8.4	7.4	7.9
30	---	---	---	---	---	---				8.2	7.2	7.6
31	---	---	---	---	---	---				---	---	---
MONTH	13.5	5.1	8.0	11.4	4.9	7.4				9.1	6.4	7.7
YEAR	13.5	4.9	8.9									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306061 PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395102 LONGITUDE 1081530 DRAINAGE AREA 309.00 DATUM 6214.00 STATE 08 COUNTY 103

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.2	7.8	8.0	---	---	---	8.4	8.0	8.2	8.3	8.2	8.3
2	8.0	7.8	7.9	---	---	---	8.3	8.2	8.2	8.3	8.2	8.3
3	8.1	7.8	7.9	---	---	---	8.3	8.2	8.2	8.3	8.2	8.3
4	7.9	7.8	7.8	---	---	---	8.3	8.2	8.2	8.3	8.1	8.2
5	8.0	7.7	7.8	---	---	---	8.3	8.2	8.2	8.3	8.2	8.2
6	8.1	7.7	7.9	---	---	---	8.3	8.1	8.2	8.3	8.1	8.2
7	8.1	7.7	7.9	---	---	---	8.3	8.2	8.2	---	---	---
8	---	---	---	---	---	---	8.4	8.2	8.3	---	---	---
9	---	---	---	8.1	7.9	8.0	8.3	8.2	8.3	8.0	7.9	7.9
10	---	---	---	8.2	7.9	8.0	8.3	8.2	8.2	8.2	8.0	8.1
11	---	---	---	8.3	8.0	8.1	8.3	8.2	8.2	8.2	8.1	8.1
12	---	---	---	8.3	8.1	8.1	8.3	8.2	8.2	8.2	8.1	8.2
13	---	---	---	8.3	8.1	8.2	8.3	8.2	8.2	8.2	8.1	8.2
14	---	---	---	8.3	8.1	8.2	8.3	8.2	8.3	8.2	8.1	8.1
15	---	---	---	8.3	8.1	8.2	8.3	8.2	8.2	8.2	8.1	8.1
16	7.9	7.8	7.9	8.3	8.1	8.2	8.3	8.1	8.3	8.2	8.1	8.2
17	8.0	7.7	7.8	8.4	8.1	8.2	8.3	8.2	8.3	8.2	8.1	8.1
18	8.1	7.7	7.8	8.3	8.1	8.2	8.3	8.2	8.2	8.2	8.1	8.1
19	8.1	7.7	7.8	8.3	8.2	8.2	8.3	8.2	8.2	8.2	8.1	8.2
20	8.0	7.7	7.8	8.2	8.1	8.2	8.3	8.2	8.2	8.2	8.1	8.2
21	8.0	7.7	7.8	8.3	8.1	8.2	8.3	8.2	8.2	8.4	8.0	8.2
22	8.1	7.7	7.8	8.3	8.2	8.2	8.3	8.2	8.3	8.4	8.3	8.3
23	8.1	7.7	7.8	8.3	8.1	8.2	8.4	8.2	8.3	8.3	8.0	8.2
24	7.9	7.7	7.8	8.3	8.1	8.2	---	---	---	8.3	8.2	8.3
25	8.0	7.7	7.8	8.3	8.1	8.2	8.2	8.0	8.1	8.3	8.2	8.3
26	8.0	7.7	7.8	8.3	8.2	8.2	8.4	8.1	8.2	8.3	8.2	8.3
27	---	---	---	8.3	8.2	8.2	8.3	8.1	8.2	8.3	8.2	8.3
28	---	---	---	8.3	8.2	8.3	---	---	---	8.3	8.2	8.3
29	---	---	---	8.3	8.2	8.2	8.2	8.0	8.1	8.4	8.3	8.3
30	---	---	---	8.3	8.2	8.3	8.3	8.0	8.2	8.4	8.2	8.3
31	---	---	---	---	---	---	8.3	8.3	8.3	8.4	8.3	8.3
MONTH	8.2	7.7	7.8	8.4	7.9	8.2	8.4	8.0	8.2	8.4	7.9	8.2

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306061 PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395102 LONGITUDE 1081530 DRAINAGE AREA 309.00 DATUM 6214.00 STATE 08 COUNTY 103

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	8.4	8.3	8.3	8.3	8.2	8.3	---	---	---	8.2	8.0	8.1
2	8.4	8.3	8.3	8.4	8.2	8.3	---	---	---	8.3	8.0	8.1
3	8.4	8.2	8.3	8.3	8.3	8.3	---	---	---	8.3	8.0	8.1
4	8.3	8.0	8.1	8.3	8.2	8.3	---	---	---	8.2	8.0	8.1
5	---	---	---	8.4	8.3	8.3	---	---	---	---	---	---
6	---	---	---	8.3	8.2	8.3	---	---	---	---	---	---
7	8.2	7.9	8.1	8.3	8.2	8.3	---	---	---	---	---	---
8	8.3	8.1	8.2	8.3	8.2	8.3	---	---	---	---	---	---
9	8.3	8.0	8.2	8.4	8.2	8.3	8.2	8.0	8.1	---	---	---
10	8.7	8.3	8.4	8.3	8.1	8.2	8.3	8.1	8.2	---	---	---
11	8.4	8.2	8.3	8.3	8.2	8.2	8.3	8.2	8.2	---	---	---
12	8.3	8.1	8.2	8.3	8.2	8.3	8.3	8.2	8.2	---	---	---
13	8.3	8.1	8.2	8.4	8.2	8.3	8.4	8.2	8.3	---	---	---
14	8.3	8.2	8.3	8.3	8.2	8.2	8.4	8.2	8.3	---	---	---
15	8.3	8.2	8.3	8.3	8.2	8.2	8.3	8.2	8.2	---	---	---
16	8.3	8.2	8.3	8.3	8.2	8.2	8.3	8.2	8.3	---	---	---
17	8.3	8.2	8.3	8.3	8.2	8.3	8.3	8.1	8.2	---	---	---
18	8.3	8.2	8.2	8.3	8.2	8.3	8.2	8.1	8.1	---	---	---
19	8.2	8.1	8.2	8.3	8.2	8.3	8.2	8.0	8.1	---	---	---
20	8.3	8.2	8.2	8.3	8.2	8.3	8.1	8.0	8.1	---	---	---
21	8.3	8.2	8.2	8.3	8.2	8.3	8.1	8.0	8.0	---	---	---
22	8.3	8.1	8.2	8.3	8.3	8.3	8.1	8.0	8.0	---	---	---
23	8.3	8.1	8.2	8.3	8.2	8.3	8.1	7.9	7.9	---	---	---
24	8.3	8.2	8.2	8.6	8.2	8.4	8.1	8.0	8.0	---	---	---
25	8.3	8.3	8.3	8.5	8.4	8.5	8.1	7.9	8.0	---	---	---
26	8.3	8.2	8.3	---	---	---	8.1	7.9	8.0	---	---	---
27	8.3	8.2	8.3	---	---	---	8.3	8.0	8.1	---	---	---
28	8.3	8.3	8.3	---	---	---	8.3	8.0	---	---	---	---
29	---	---	---	---	---	---	8.3	8.0	8.1	---	---	---
30	---	---	---	---	---	---	8.3	8.0	8.1	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	8.7	7.9	8.3	8.6	8.1	8.3	8.4	7.9	8.1	8.3	8.0	8.1

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306061 PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395102 LONGITUDE 1081530 DRAINAGE AREA 309.00 DATUM 6214.00 STATE 08 COUNTY 103

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	8.5	8.2	8.3	---	---	---	8.4	8.0	8.2
2	---	---	---	8.5	8.1	8.3	---	---	---	8.4	8.0	8.2
3	---	---	---	8.5	8.1	8.3	---	---	---	8.4	8.0	8.2
4	---	---	---	8.5	8.1	8.3	---	---	---	8.4	8.1	8.2
5	---	---	---	8.5	8.1	8.3	---	---	---	8.4	8.1	8.2
6	---	---	---	8.5	8.0	8.2	---	---	---	8.4	8.0	8.2
7	---	---	---	8.4	8.0	8.2	---	---	---	8.4	8.0	8.1
8	---	---	---	8.5	8.1	8.2	---	---	---	8.3	8.0	8.1
9	8.4	8.1	8.3	8.3	8.0	8.2	---	---	---	8.2	7.9	8.1
10	8.4	7.9	8.2	8.4	8.0	8.2	---	---	---	8.2	7.9	8.0
11	8.5	8.0	8.2	8.3	8.0	8.2	---	---	---	8.0	7.9	7.9
12	8.4	8.0	8.2	8.2	8.0	8.2	---	---	---	8.1	7.8	8.0
13	8.4	8.0	8.2	8.3	8.0	8.2	---	---	---	8.0	7.9	7.9
14	8.3	8.0	8.1	8.4	8.0	8.2	---	---	---	8.1	7.9	8.0
15	8.4	8.0	8.2	8.5	8.1	8.3	---	---	---	8.4	7.9	8.0
16	8.5	8.0	8.2	8.5	8.1	8.3	---	---	---	8.3	8.0	8.2
17	8.4	8.1	8.2	8.5	8.1	8.3	---	---	---	8.3	8.1	8.2
18	8.4	8.1	8.2	8.6	8.1	8.3	---	---	---	8.3	8.1	8.2
19	8.5	8.0	8.2	8.6	8.1	8.3	---	---	---	8.3	8.1	8.2
20	8.5	8.0	8.2	8.6	8.1	8.3	---	---	---	8.4	8.1	8.2
21	8.4	8.1	8.2	8.6	8.1	8.3	---	---	---	8.5	8.1	8.3
22	8.4	8.0	8.2	8.6	8.2	8.4	---	---	---	8.4	8.1	8.3
23	8.5	8.0	8.2	8.6	8.2	8.4	---	---	---	8.5	8.1	8.3
24	8.6	8.0	8.3	8.6	8.2	8.3	---	---	---	8.4	8.1	8.3
25	8.4	8.1	8.2	8.6	8.1	8.4	---	---	---	8.3	8.2	8.2
26	8.5	8.0	8.2	8.6	8.2	8.4	---	---	---	8.4	8.2	8.3
27	8.5	8.0	8.3	8.7	8.2	8.4	---	---	---	8.3	8.2	8.3
28	8.5	8.1	8.3	---	---	---	---	---	---	8.3	8.2	8.2
29	8.5	8.1	8.3	---	---	---	---	---	---	8.3	8.1	8.2
30	8.5	8.1	8.3	---	---	---	---	---	---	8.3	8.1	8.2
31	---	---	---	---	---	---	8.4	8.2	8.3	---	---	---
MONTH	8.6	7.9	8.2	8.7	8.0	8.3	8.4	8.2	8.3	8.5	7.8	8.2
YEAR	8.7	7.7	8.2									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306061 PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395102 LONGITUDE 1081530 DRAINAGE AREA 309.00 DATUM 6214.00 STATE 08 COUNTY 103

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	1570	1510	1540	---	---	---	1330	1270	1290	1250	1210	1230
2	1560	1510	1540	---	---	---	1290	1280	1290	1280	1210	1240
3	1580	1500	1540	---	---	---	1290	1270	1280	1270	1220	1240
4	1550	1470	1510	---	---	---	1290	1270	1290	1320	1220	1260
5	1540	1440	1500	---	---	---	1290	1280	1280	1250	1230	1240
6	1550	1500	1530	---	---	---	1280	1270	1280	1280	1200	1240
7	1550	1500	1530	---	---	---	1290	1270	1280	---	---	---
8	---	---	---	---	---	---	1280	1270	1270	---	---	---
9	---	---	---	1410	1380	1380	1280	1270	1270	1310	1250	1280
10	---	---	---	1400	1380	1390	1270	1270	1270	1270	1200	1240
11	---	---	---	1410	1380	1400	1270	1270	1270	1230	1200	1210
12	---	---	---	1390	1340	1370	1270	1260	1270	1230	1190	1210
13	---	---	---	1350	1320	1340	1270	1260	1260	1250	1200	1230
14	---	---	---	1340	1330	1330	1270	1260	1260	1260	1180	1230
15	---	---	---	1340	1330	1330	1270	1260	1260	1250	1130	1230
16	1540	1460	1500	1340	1330	1330	1260	1250	1250	1240	1230	1240
17	1550	1510	1530	1350	1330	1340	1260	1240	1250	1240	1230	1230
18	1550	1510	1530	1340	1310	1330	1330	1250	1280	1240	1230	1230
19	1540	1500	1530	1350	1330	1340	1260	1240	1250	1240	1230	1230
20	1570	1510	1540	1340	1310	1330	1260	1250	1260	1230	1230	1230
21	1570	1520	1550	1330	1290	1320	1250	1230	1240	1240	1200	1230
22	1590	1530	1560	1310	1300	1300	1250	1230	1240	1230	1180	1200
23	1590	1520	1570	1300	1290	1300	1310	1250	1280	1310	1190	1250
24	1590	1520	1550	1300	1290	1290	---	---	---	1220	1190	1220
25	1590	1560	1570	1300	1260	1280	1260	1230	1240	1250	1210	1220
26	1580	1530	1560	1310	1270	1290	1330	1240	1280	1230	1170	1200
27	---	---	---	1310	1270	1290	1310	1220	1260	1220	1180	1210
28	---	---	---	1290	1280	1290	---	---	---	1270	1190	1230
29	---	---	---	1290	1270	1280	1280	1200	1230	1220	1200	1220
30	---	---	---	1280	1280	1280	1250	1190	1210	1280	1190	1240
31	---	---	---	---	---	---	1240	1210	1220	1260	1180	1210
MONTH	1590	1440	1540	1410	1260	1320	1330	1190	1260	1320	1130	1230

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306061 PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395102 LONGITUDE 1081530 DRAINAGE AREA 309.00 DATUM 6214.00 STATE 08 COUNTY 103

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1220	1190	1200	1200	1180	1190	---	---	---	1530	1460	1500
2	1240	1200	1220	1200	1150	1190	---	---	---	1550	1470	1510
3	1270	1180	1240	1120	1020	1080	---	---	---	1490	1390	1440
4	1340	1240	1300	1150	1080	1110	---	---	---	1470	1320	1390
5	---	---	---	1170	1110	1140	---	---	---	1350	1210	1270
6	---	---	---	1210	1160	1190	---	---	---	1450	1290	1350
7	1340	1240	1290	1180	1160	1180	---	---	---	1570	1460	1510
8	1270	1190	1230	1190	1170	1180	---	---	---	1580	1550	1570
9	1280	1220	1250	1200	1170	1180	1190	1160	1180	1570	1550	1560
10	1210	1160	1180	1180	1170	1170	1180	1170	1170	1570	1550	1550
11	1230	1160	1200	1190	1170	1180	1190	1150	1170	1560	1510	1540
12	1280	1150	1210	1180	1100	1130	1180	1140	1160	1560	1350	1460
13	1260	1140	1200	1160	1100	1130	1170	1130	1150	1360	1270	1310
14	1210	1180	1200	1100	1060	1070	1220	1170	1200	1420	1260	1320
15	1240	1130	1180	1070	1010	1030	1210	1120	1170	1550	1310	1430
16	1220	1130	1180	1080	1000	1040	1160	1130	1150	1570	1530	1550
17	1200	1050	1140	1130	1080	1100	1320	1170	1210	1580	1500	1540
18	1210	1080	1150	1150	1120	1140	1340	1300	1320	1600	1560	1580
19	1220	962	1120	1160	1140	1150	1430	1300	1340	1630	1500	1540
20	1190	819	1040	1170	1150	1160	1440	1350	1400	1550	1440	1490
21	1150	801	999	1190	1160	1180	1480	1440	1450	1560	1520	1540
22	1120	685	937	1200	1170	1180	1500	1470	1480	1570	1520	1540
23	1120	806	973	1200	1180	1190	1500	1460	1480	1600	1520	1560
24	1150	894	1090	1200	1150	1190	1530	1500	1510	1560	1520	1540
25	1190	1130	1170	1200	1180	1190	1550	1530	1540	1580	1540	1560
26	1190	1140	1180	---	---	---	1550	1420	1520	1580	1530	1560
27	1180	1150	1170	---	---	---	1440	1390	1420	1560	1360	1500
28	1210	1180	1190	---	---	---	1420	1390	1410	1530	1360	1460
29	---	---	---	---	---	---	1480	1380	1410	1540	1490	1520
30	---	---	---	---	---	---	1530	1460	1490	1530	1500	1520
31	---	---	---	---	---	---	---	---	---	1530	1480	1500
MONTH	1340	685	1160	1210	1000	1150	1550	1120	1330	1630	1210	1490

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306061 PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395102 LONGITUDE 1081530 DRAINAGE AREA 309.00 DATUM 6214.00 STATE 08 COUNTY 103

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	1540	1500	1520	1600	1580	1580				1340	1280	1320
2	1550	1500	1530	1600	1570	1590				1340	1310	1330
3	1570	1530	1540	1610	1580	1590				1340	1320	1330
4	1580	1550	1570	1600	1580	1590				1340	1320	1330
5	1580	1550	1560	1610	1590	1600				1340	1290	1330
6	1570	1540	1560	1610	1590	1600				1350	1230	1290
7	1570	1550	1560	1630	1600	1610				1320	1280	1310
8	1570	1550	1570	1640	1550	1620				1330	1300	1320
9	1600	1550	1560	1660	1610	1640				1320	1220	1290
10	1570	1540	1560	1680	1660	1670				1300	1210	1270
11	1540	1500	1520	1690	1660	1670				1310	1210	1250
12	1550	1520	1530	1670	1630	1650				1270	1240	1250
13	1560	1530	1550	1680	1630	1660				1260	1230	1250
14	1550	1480	1510	1640	1610	1620				1320	1210	1250
15	1590	1530	1570	1630	1590	1610				1270	1230	1250
16	1590	1550	1570	1620	1590	1610				1270	1250	1260
17	1590	1540	1570	1650	1590	1610				1280	1250	1270
18	1590	1540	1570	1610	1570	1590				1300	1270	1280
19	1590	1560	1580	1600	1560	1580				1310	1260	1280
20	1580	1570	1570	1620	1570	1600				1290	124C	1270
21	1580	1540	1570	1600	1560	1580				1280	1250	1270
22	1590	1570	1580	1610	1560	1580				1290	1250	1270
23	1610	1570	1590	1610	1560	1580				1280	1230	1260
24	1610	1570	1590	1600	1550	1580				1290	1250	1270
25	1610	1570	1590	1580	1530	1560				1280	1260	1270
26	1610	1570	1590	1570	1530	1560				1270	1250	1260
27	1600	1570	1590	1590	1060	1520				1260	1220	1240
28	1600	1570	1590	---	---	---				1270	1210	1240
29	1600	1570	1590	---	---	---				1250	1230	1240
30	1600	1570	1580	---	---	---				1240	1200	1220
31	---	---	---	---	---	---				---	---	---
MONTH	1610	1480	1560	1690	1060	1600				1350	1200	1280
YEAR	1690	685	1360									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306061 PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395102 LONGITUDE 1081530 DRAINAGE AREA 309.00 DATUM 6214.00 STATE 08 COUNTY 103

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	15.0	7.0	11.0	---	---	---	1.0	.0	.5	4.0	1.0	2.0
2	12.5	9.5	11.0	---	---	---	3.5	.0	1.5	1.0	.0	.0
3	13.5	10.0	11.5	---	---	---	4.0	.0	2.0	.5	.0	.0
4	11.5	9.0	10.5	---	---	---	3.5	.0	2.0	.5	.0	.0
5	11.5	8.0	9.5	---	---	---	5.5	2.0	3.5	3.5	.0	2.0
6	14.0	7.0	10.5	---	---	---	5.0	1.0	3.0	1.5	.0	1.0
7	13.5	7.5	11.0	---	---	---	5.5	1.5	3.5	---	---	---
8	---	---	---	---	---	---	5.5	1.5	3.5	---	---	---
9	---	---	---	---	---	---	5.0	1.0	3.0	.5	.0	.0
10	---	---	---	7.5	3.0	5.0	5.5	2.0	3.5	.5	.0	.0
11	---	---	---	7.5	3.0	5.0	5.5	2.5	4.0	.5	.0	.0
12	---	---	---	7.5	2.5	5.0	5.0	1.5	3.5	.5	.0	.0
13	---	---	---	8.0	4.0	6.0	4.0	2.5	3.5	.5	.0	.5
14	---	---	---	8.0	5.0	6.5	4.0	1.5	2.5	.5	.0	.5
15	---	---	---	8.0	5.0	6.5	5.5	2.5	4.0	2.0	.0	.5
16	9.0	6.5	8.0	8.5	4.5	6.0	3.0	.0	2.0	3.5	.0	1.5
17	11.0	7.0	9.0	7.0	3.5	5.5	2.5	.0	1.0	4.5	1.0	2.5
18	11.0	6.5	8.5	5.5	4.0	5.0	1.5	.0	1.0	3.5	.5	2.0
19	11.0	5.0	8.0	5.0	1.5	3.5	4.5	1.0	2.5	4.0	.0	2.0
20	11.0	5.5	8.5	4.5	1.0	3.0	6.0	3.0	4.5	4.5	.0	2.0
21	10.5	5.0	8.0	5.5	2.0	4.0	4.0	2.5	3.5	2.5	.0	1.5
22	10.0	4.5	7.5	6.5	3.5	5.0	2.5	.5	1.5	1.0	.0	.5
23	10.0	4.0	7.0	7.5	4.5	6.0	.5	.0	.0	.5	.0	.0
24	7.5	5.5	6.5	7.5	3.5	5.5	---	---	---	4.0	.0	1.5
25	10.0	5.0	7.0	5.0	1.5	3.5	.5	.0	.5	4.0	.0	2.0
26	9.5	4.0	6.5	3.0	.0	1.5	.5	.0	.0	6.5	1.0	3.5
27	---	---	---	2.5	.0	1.0	1.5	.0	.5	5.5	1.5	3.0
28	---	---	---	3.0	.5	2.0	---	---	---	3.0	.0	1.5
29	---	---	---	3.0	1.0	2.0	.5	.0	.0	3.5	.5	2.0
30	---	---	---	3.0	1.0	2.0	4.5	.0	2.0	2.0	.0	.5
31	---	---	---	---	---	---	2.0	.0	1.0	3.0	.0	1.0
MONTH	15.0	4.0	9.0	8.5	.0	4.5	6.0	.0	2.0	6.5	.0	1.0

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE IS 10-31-83

STATION NUMBER 09306061 PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. STREAM SOURCE AGENCY USGS
LATITUDE 395102 LONGITUDE 1081530 DRAINAGE AREA 309.00 DATUM 6214.00 STATE 08 COUNTY 103

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	3.5	.0	1.5	7.0	2.0	5.0	---	---	---	14.0	5.5	9.5
2	3.0	.0	1.0	11.0	4.5	7.0	---	---	---	15.0	5.0	10.0
3	1.5	.0	.5	6.5	3.0	5.0	---	---	---	18.0	7.5	11.5
4	.5	.0	.0	7.0	1.0	4.0	---	---	---	10.5	7.5	8.5
5	---	---	---	6.0	1.5	3.5	---	---	---	14.0	4.5	8.5
6	---	---	---	8.5	.0	3.5	---	---	---	16.5	3.0	9.0
7	.5	.0	.0	9.5	1.5	5.0	---	---	---	14.0	4.0	9.0
8	.5	.0	.0	8.0	1.5	4.5	---	---	---	16.0	6.5	10.5
9	.5	.0	.0	8.5	1.0	5.0	12.5	.0	6.0	17.0	6.0	10.5
10	.0	.0	.0	7.5	2.5	5.0	14.0	.5	7.0	13.5	6.0	10.5
11	.0	.0	.0	8.5	4.0	6.0	13.5	4.5	8.5	14.5	6.0	11.0
12	.5	.0	.0	10.5	4.0	6.5	11.5	7.0	9.0	7.0	3.5	5.0
13	.5	.0	.0	11.5	1.5	6.5	17.0	5.0	10.5	12.5	3.5	7.5
14	5.0	.5	3.0	8.0	2.5	5.5	17.0	3.5	9.5	13.5	6.0	9.5
15	6.0	2.5	4.0	9.5	4.5	6.0	12.5	4.0	8.0	15.0	5.0	10.0
16	5.0	2.5	3.5	9.5	3.5	6.0	14.0	1.5	6.5	17.5	6.0	11.0
17	7.5	1.5	4.0	11.0	2.0	6.5	15.0	1.5	7.5	18.5	6.0	12.0
18	6.5	.5	3.5	11.0	3.5	7.0	13.0	2.5	7.5	17.0	6.5	11.0
19	7.0	.0	3.0	6.0	2.0	4.0	10.5	2.0	5.5	14.5	7.0	10.5
20	8.0	1.0	3.5	8.0	1.0	4.0	7.5	1.0	4.0	18.5	6.5	12.0
21	8.5	1.0	4.0	6.0	.0	3.0	14.0	.5	6.5	20.0	5.5	12.0
22	8.5	1.5	4.0	8.0	.0	3.5	16.0	2.0	8.0	17.0	6.5	11.5
23	8.0	2.5	4.5	12.0	.5	5.5	12.0	4.5	7.5	20.5	7.0	13.0
24	7.5	1.0	4.0	12.5	1.0	6.5	16.0	4.5	9.5	18.0	7.5	11.5
25	9.0	2.0	5.0	13.5	1.5	7.0	14.0	4.5	8.5	19.0	6.5	12.0
26	10.0	1.0	5.0	---	---	---	13.0	5.0	8.0	21.0	6.5	13.0
27	8.0	2.5	5.0	---	---	---	13.5	6.0	9.0	19.5	7.5	13.0
28	11.5	2.5	6.0	---	---	---	18.5	4.5	---	17.0	8.5	12.0
29	---	---	---	---	---	---	15.0	6.5	9.0	18.5	6.5	12.0
30	---	---	---	---	---	---	16.5	3.5	9.0	13.5	7.5	10.5
31	---	---	---	---	---	---	---	---	---	20.5	6.5	12.5
MONTH	11.5	.0	2.5	13.5	.0	5.0	18.5	.0	8.0	21.0	3.0	10.5

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY   PROCESS DATE IS 10-31-83

STATION NUMBER 09306061   PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO.   STREAM   SOURCE AGENCY USGS
LATITUDE 395102   LONGITUDE 1081530   DRAINAGE AREA   309.00   DATUM 6214.00   STATE 08   COUNTY 103

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.5	7.0	11.5	21.5	10.0	16.5				20.5	10.5	15.0
2	18.0	6.5	12.0	23.0	7.0	14.5				19.5	9.5	14.5
3	19.0	8.0	13.0	23.5	7.5	15.0				19.5	9.5	14.5
4	20.0	6.0	12.5	23.0	7.5	15.0				17.5	11.0	14.0
5	19.5	6.0	12.0	18.0	8.0	13.0				18.5	12.5	14.5
6	18.0	5.0	11.5	22.5	7.0	14.0				17.5	10.0	13.5
7	20.5	5.0	11.5	21.0	7.5	14.0				15.0	10.5	12.0
8	19.5	5.5	12.0	18.0	10.0	13.0				16.5	10.5	13.0
9	21.0	5.5	12.5	19.0	10.0	14.0				15.5	10.0	13.0
10	18.5	6.0	12.0	21.5	9.0	15.0				15.5	11.0	13.0
11	22.5	7.5	14.0	20.0	10.0	14.5				13.0	10.5	11.5
12	18.0	7.5	12.5	16.5	9.0	15.0				14.5	9.0	11.5
13	18.5	7.5	12.5	19.0	10.0	14.0				10.5	9.0	9.5
14	15.5	7.0	11.0	21.0	9.5	15.0				10.5	7.5	9.0
15	18.5	7.5	12.5	21.0	9.5	15.0				15.0	8.0	11.0
16	22.5	7.5	14.5	22.0	9.5	15.0				16.0	9.0	12.5
17	22.0	9.0	15.0	22.0	11.5	15.5				17.0	10.5	13.0
18	18.5	10.0	13.0	22.5	11.0	16.0				15.0	9.0	12.0
19	21.0	7.5	13.5	23.0	10.5	16.0				14.5	9.0	11.5
20	21.5	7.5	13.5	21.5	10.0	15.5				16.0	9.0	12.5
21	16.0	8.0	12.0	22.0	10.5	16.0				17.5	9.5	13.0
22	17.0	9.0	12.0	21.5	12.5	17.0				16.5	9.5	13.0
23	19.0	8.5	13.0	23.5	12.0	17.5				18.0	10.0	13.5
24	22.5	8.0	14.5	20.0	12.5	16.0				16.0	8.5	12.5
25	18.0	8.5	12.5	22.0	12.0	16.5				12.5	10.0	11.5
26	22.5	7.5	14.0	20.0	13.0	16.0				15.0	11.0	12.5
27	24.0	8.0	15.0	21.5	12.5	16.5				12.5	9.5	11.0
28	24.0	8.5	15.5	---	---	---				9.5	8.0	8.5
29	23.5	8.0	15.0	---	---	---				10.5	7.0	8.5
30	21.5	10.0	14.5	---	---	---				11.5	7.5	9.5
31	---	---	---	---	---	---				---	---	---
MONTH	24.0	5.0	13.0	23.5	7.0	15.0				20.5	7.0	12.0
YEAR	24.0	.0	7.5									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09304800 - WHITE RIVER BELOW MEEKER, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	ALKA-LINITY FIELD (MG/L AS CACO3) (00410)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BICAR-BONATE FET-FLD (MG/L AS HCO3) (00440)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	CAR-BONATE FET-FLD (MG/L AS CO3) (00445)
OCT , 1982												
09...	157	--	--	--	--	192	--	--	--	--	78	0
14...	--	--	--	--	--	--	--	--	--	--	61	--
21...	--	--	--	--	--	--	--	--	--	--	60	--
28...	--	--	--	--	--	--	--	--	--	--	55	--
NOV												
05...	--	--	--	--	--	--	--	--	--	--	54	--
09...	--	--	<.060	<1	30	--	--	20	--	<1	61	--
10...	--	--	--	--	--	--	--	--	--	--	60	--
19...	--	--	--	--	--	--	--	--	--	--	60	--
DEC												
[illegible]...	--	--	--	--	--	--	--	--	--	--	59	--
[illegible]9...	--	--	--	--	--	--	--	--	--	--	60	--
17...	--	--	--	--	--	--	--	--	--	--	58	--
22...	--	--	--	--	--	--	--	--	--	--	59	--
31...	--	--	--	--	--	--	--	--	--	--	77	--
JAN , 1983												
05...	--	--	--	--	--	--	--	--	--	--	62	--
11...	--	--	--	--	--	--	--	--	--	--	62	--
19...	--	--	--	--	--	--	--	--	--	--	59	--
21...	--	--	--	--	--	--	--	20	--	--	61	--
FEB												
03...	--	--	--	--	--	--	--	--	--	--	65	--
09...	--	--	--	--	--	--	--	--	--	--	61	--
24...	--	--	--	--	--	--	--	--	--	--	62	--
MAR												
03...	--	--	--	--	--	--	--	--	--	--	54	--
10...	--	--	--	--	--	--	--	--	--	--	64	--
17...	--	--	--	--	--	--	--	--	--	--	73	--
28...	--	--	<.060	--	--	--	--	20	--	--	68	--
APR												
01...	--	--	--	--	--	--	--	--	--	--	68	--
05...	--	--	--	--	--	--	--	--	--	--	68	--
15...	--	--	--	--	--	--	--	--	--	--	69	--
18...	--	--	--	--	--	--	--	--	--	--	72	--
MAY												
20...	--	--	--	--	--	--	--	30	--	--	61	--
JUN												
02...	--	--	--	--	--	130	--	--	--	--	38	0
09...	--	--	--	--	--	130	--	--	--	--	37	0
16...	--	--	--	--	--	140	--	--	--	--	40	0

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09304800 - WHITE RIVER BELOW MEEKER, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	ALKALINITY FIELD (MG/L AS CACO3) (00410)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BICARBONATE FET-FLD (MG/L AS HCO3) (00440)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L) (00310)	BORON, DISSOLVED (UG/L AS B) (01020)	BROMIDE DISSOLVED (MG/L AS BR) (71870)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	CARBONATE FET-FLD (MG/L AS CO3) (00445)
JUN , 1983												
16...	--	--	.140	1	37	--	--	10	--	<1	42	--
27...	--	--	--	--	--	120	--	--	--	--	34	0
30...	--	--	--	--	--	120	--	--	--	--	35	0

WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	CYANIDE DIS-SOLVED (MG/L AS CN) (00723)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML) (31679)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
OCT , 1982											
09...	--	24	--	--	--	--	--	--	--	--	--
14...	--	9.0	--	--	--	--	--	--	--	--	--
21...	--	9.0	--	--	--	--	--	--	--	--	--
28...	--	9.0	--	--	--	--	--	--	--	--	--
NOV											
05...	--	8.0	--	--	--	--	--	--	--	--	--
09...	--	10	<10	--	--	2	--	--	.2	14	4
10...	--	9.0	--	--	--	--	--	--	--	--	--
19...	--	10	--	--	--	--	--	--	--	--	--
DEC											
03...	--	10	--	--	--	--	--	--	--	--	--
09...	--	10	--	--	--	--	--	--	--	--	--
17...	--	10	--	--	--	--	--	--	--	--	--
22...	--	11	--	--	--	--	--	--	--	--	--
31...	--	18	--	--	--	--	--	--	--	--	--
JAN , 1983											
05...	--	10	--	--	--	--	--	--	--	--	--
11...	--	11	--	--	--	--	--	--	--	--	--
19...	--	11	--	--	--	--	--	--	--	--	--
21...	--	11	--	--	--	--	--	--	.2	--	--
FEB											
03...	--	6.7	--	--	--	--	--	--	--	--	--
09...	--	6.4	--	--	--	--	--	--	--	--	--
24...	--	7.1	--	--	--	--	--	--	--	--	--
MAR											
03...	--	7.8	--	--	--	--	--	--	--	--	--
10...	--	8.2	--	--	--	--	--	--	--	--	--
17...	--	9.0	--	--	--	--	--	--	--	--	--
28...	--	14	--	--	--	--	--	--	.2	--	--
APR											
01...	--	13	--	--	--	--	--	--	--	--	--
05...	--	13	--	--	--	--	--	--	--	--	--
15...	--	13	--	--	--	--	--	--	--	--	--
18...	--	13	--	--	--	--	--	--	--	--	--
MAY											
20...	--	7.6	--	--	--	--	--	--	.1	--	--
JUN											
02...	--	2.5	--	--	--	--	--	--	--	--	--
09...	--	2.1	--	--	--	--	--	--	--	--	--
16...	--	2.8	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09304800 - WHITE RIVER BELOW MEEKER, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	CYANIDE DIS- SOLVED (MG/L AS CN) (00723)	STREP- TOCOCCI FECAL, (COLS. PER 100 ML) (31679)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
JUN , 1983											
16...	--	2.8	<10	--	--	1	--	--	.1	42	2
27...	--	2.5	--	--	--	--	--	--	--	--	--
30...	--	2.1	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09304800 - WHITE RIVER BELOW MEEKER, CO.

PROCESS DATE 10/31/83
DISTRICT CODE 08

WATER QUALITY DATA

DATE	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	OIL AND GREASE (MG/L) (00550)	CARBON, INORG + ORGANIC DIS- SOLVED (MG/L AS C) (00682)	CARBON, INOR- GANIC, DIS- SOLVED (MG/L AS C) (00691)
OCT , 1982											
09...	--	22	--	--	--	--	--	--	--	--	--
14...	--	16	--	--	--	--	--	--	--	--	--
21...	--	16	--	--	--	--	--	--	--	--	--
28...	--	16	--	--	--	--	--	--	--	--	--
NOV											
05...	--	15	--	--	--	--	--	--	--	--	--
09...	--	16	8	<.1	--	<1	--	--	--	--	--
10...	--	16	--	--	--	--	--	--	--	--	--
19...	--	17	--	--	--	--	--	--	--	--	--
DEC											
03...	--	16	--	--	--	--	--	--	--	--	--
09...	--	15	--	--	--	--	--	--	--	--	--
17...	--	15	--	--	--	--	--	--	--	--	--
22...	--	16	--	--	--	--	--	--	--	--	--
31...	--	21	--	--	--	--	--	--	--	--	--
JAN , 1983											
05...	--	15	--	--	--	--	--	--	--	--	--
11...	--	15	--	--	--	--	--	--	--	--	--
19...	--	14	--	--	--	--	--	--	--	--	--
21...	--	15	--	--	--	--	--	--	--	--	--
FEB											
03...	--	16	--	--	--	--	--	--	--	--	--
09...	--	15	--	--	--	--	--	--	--	--	--
24...	--	17	--	--	--	--	--	--	--	--	--
MAR											
03...	--	18	--	--	--	--	--	--	--	--	--
10...	--	20	--	--	--	--	--	--	--	--	--
17...	--	24	--	--	--	--	--	--	--	--	--
28...	--	23	--	--	--	--	--	--	--	--	--
APR											
01...	--	24	--	--	--	--	--	--	--	--	--
05...	--	22	--	--	--	--	--	--	--	--	--
15...	--	21	--	--	--	--	--	--	--	--	--
18...	--	23	--	--	--	--	--	--	--	--	--
MAY											
20...	--	21	--	--	--	--	--	--	--	--	--
JUN											
02...	--	9.4	--	--	--	--	--	--	--	--	--
09...	--	9.0	--	--	--	--	--	--	--	--	--
16...	--	9.8	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09304800 - WHITE RIVER BELOW MEEKER, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L) (38260)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	OIL AND GREASE (MG/L) (00550)	CARBON, INORG + ORGANIC DIS-SOLVED (MG/L AS C) (00682)	CARBON, INOR-GANIC, DIS-SOLVED (MG/L AS C) (00691)
JUN , 1983											
16...	--	9.9	10	<.1	--	2	--	--	--	--	--
27...	--	8.8	--	--	--	--	--	--	--	--	--
30...	--	8.8	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
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WATER QUALITY DATA

DATE	CARBON, TOTAL (MG/L AS C) (00690)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR-DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI-ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX-APHENE, TOTAL (UG/L) (39400)
OCT , 1982											
09...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
NOV											
05...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
DEC											
03...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
JAN , 1983											
05...	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
FEB											
03...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
MAR											
03...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
APR											
01...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
MAY											
20...	--	--	--	--	--	--	--	--	--	--	--
JUN											
02...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
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WATER QUALITY DATA

DATE	CARBON, TOTAL (MG/L AS C) (00690)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX- APHENE, TOTAL (UG/L) (39400)
JUN , 1983											
16...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09304800 - WHITE RIVER BELOW MEEKER, CO.

PROCESS DATE 10/31/83
DISTRICT CODE 08

WATER QUALITY DATA

DATE	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	PCB, TOTAL (UG/L) (39516)	MALA-THION, TOTAL (UG/L) (39530)	PARA-THION, TOTAL (UG/L) (39540)	DI-AZINON, TOTAL (UG/L) (39570)	METHYL PARA-THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PHENOLS TOTAL (UG/L) (32730)
OCT , 1982											
09...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
NOV											
05...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
DEC											
03...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
JAN , 1983											
05...	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
FEB											
03...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
MAR											
03...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
APR											
01...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
MAY											
20...	--	--	--	--	--	--	--	--	--	--	--
JUN											
02...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
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WATER QUALITY DATA

DATE	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	PCB, TOTAL (UG/L) (39516)	MALA-THION, TOTAL (UG/L) (39530)	PARA-THION, TOTAL (UG/L) (39540)	DI-AZINON, TOTAL (UG/L) (39570)	METHYL PARA-THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PHENOLS TOTAL (UG/L) (32730)
JUN , 1983											
16...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--

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WATER QUALITY DATA

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SULFIDE DIS- SOLVED (MG/L AS S) (00746)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)
OCT , 1982											
09...	2.7	--	--	30	--	--	149	--	--	--	--
14...	1.5	--	--	17	--	--	100	--	--	--	--
21...	1.1	--	--	15	--	--	99	--	--	--	--
28...	1.4	--	--	17	--	--	100	--	--	--	--
NOV											
05...	1.0	--	--	14	--	--	95	--	--	--	--
09...	1.2	2	14	16	310	610	110	--	6	--	--
10...	1.1	--	--	16	--	--	100	--	--	--	--
19...	1.2	--	--	17	--	--	110	--	--	--	--
DEC											
03...	1.4	--	--	17	--	--	110	--	--	--	--
09...	1.0	--	--	16	--	--	100	--	--	--	--
17...	18	--	--	15	--	--	110	--	--	--	--
22...	.8	--	--	15	--	--	120	--	--	--	--
31...	1.6	--	--	23	--	--	150	--	--	--	--
JAN , 1983											
05...	1.2	--	--	14	--	--	100	--	--	--	--
11...	1.2	--	--	17	--	--	120	--	--	--	--
19...	.8	--	--	15	--	--	100	--	--	--	--
21...	1.2	--	16	16	310	620	110	--	--	--	--
FEB											
03...	1.2	--	--	18	--	--	110	--	--	--	--
09...	1.2	--	--	17	--	--	110	--	--	--	--
24...	1.6	--	--	21	--	--	120	--	--	--	--
MAR											
03...	3.9	--	--	22	--	--	110	--	--	--	--
10...	2.3	--	--	25	--	--	140	--	--	--	--
17...	2.0	--	--	6.7	--	--	160	--	--	--	--
28...	1.3	--	13	25	--	710	160	--	--	--	--
APR											
01...	1.2	--	--	28	--	--	170	--	--	--	--
05...	1.2	--	--	24	--	--	150	--	--	--	--
15...	.8	--	--	23	--	--	160	--	--	--	--
18...	1.2	--	--	34	--	--	160	--	--	--	--
MAY											
20...	1.9	--	13	19	--	590	120	--	--	--	--
JUN											
02...	1.2	--	--	5.3	--	--	36	--	--	--	--
09...	1.2	--	--	5.5	--	--	34	--	--	--	--
16...	1.2	--	--	6.0	--	--	40	--	--	--	--

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WATER QUALITY DATA

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SULFIDE DIS-SOLVED (MG/L AS S) (00746)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137) (03515)
JUN , 1983											
16...	1.1	1	12	6.3	--	280	44	--	<3	--	--
27...	1.2	--	--	5.7	--	--	32	--	--	--	--
30...	1.2	--	--	5.3	--	--	33	--	--	--	--

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WATER QUALITY DATA

DATE	ALKA-LINITY FIELD (MG/L AS CACO3) (00410)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BICAR-BONATE FET-FLD (MG/L AS HCO3) (00440)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	CAR-BONATE FET-FLD (MG/L AS CO3) (00445)
NOV , 1982												
02...	--	20	.120	2	110	--	.9	190	<.01	<1	70	--
MAR , 1983												
01...	--	--	.440	2	--	--	--	190	--	--	64	--
31...	--	--	.080	--	--	--	--	160	--	--	73	--
APR												
06...	--	--	.110	2	--	--	--	190	--	--	71	--
MAY												
10...	--	--	--	--	--	--	2.5	--	--	--	--	--
10...	--	30	.090	4	91	--	--	80	.01	<1	58	--
27...	--	--	.100	--	--	--	--	80	--	--	58	--
AUG												
16...	--	--	.090	3	--	--	--	170	--	--	74	--
SEP												
08...	--	--	.050	2	--	--	--	190	--	--	71	--

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WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	CYANIDE DIS- SOLVED (MG/L AS CN) (00723)	STREP- TOCOCCI FECAL, (COLS. PER 100 ML) (31679)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
NOV , 1982											
02...	20	15	10	--	K60	1	--	--	.9	22	3
MAR , 1983											
01...	--	16	--	--	--	--	--	--	.9	44	--
31...	--	17	--	--	--	--	--	--	.7	--	--
APR											
06...	--	16	--	--	--	--	--	--	.9	8	--
MAY											
10...	--	--	--	--	2200	--	--	--	--	--	--
10...	210	8.5	<10	--	--	5	--	--	.4	14	<1
27...	--	13	--	--	--	--	--	--	.4	--	--
AUG											
16...	--	14	--	--	--	--	--	--	.7	8	--
SEP											
08...	--	13	--	--	--	--	--	--	.2	15	--

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WATER QUALITY DATA

DATE	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	OIL AND GREASE (MG/L) (00550)	CARBON, INORG + ORGANIC DIS- SOLVED (MG/L AS C) (00682)	CARBON, INOR- GANIC, DIS- SOLVED (MG/L AS C) (00691)
NOV , 1982											
02...	23	44	61	<.1	--	6	--	--	--	--	--
MAR , 1983											
01...	--	40	87	--	--	--	--	--	--	--	--
31...	--	44	--	--	--	--	--	--	--	--	--
APR											
06...	--	46	55	--	--	--	--	--	--	--	--
MAY											
10...	--	--	--	--	--	--	--	--	--	--	--
10...	18	32	24	<.1	--	7	--	--	--	--	--
27...	--	30	--	--	--	--	--	--	--	--	--
AUG											
16...	--	44	28	--	--	--	--	--	--	--	--
SEP											
08...	--	45	37	--	--	--	--	--	--	--	--

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WATER QUALITY DATA

DATE	CARBON, TOTAL (MG/L AS C) (00690)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR-DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI-ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX-APHENE, TOTAL (UG/L) (39400)
NOV , 1982											
02...	--	--	--	--	--	--	--	--	--	--	--
MAR , 1983											
01...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
APR											
06...	--	--	--	--	--	--	--	--	--	--	--
MAY											
10...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
AUG											
16...	--	--	--	--	--	--	--	--	--	--	--
SEP											
08...	--	--	--	--	--	--	--	--	--	--	--

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WATER QUALITY DATA

DATE	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	PCB, TOTAL (UG/L) (39516)	MALA-THION, TOTAL (UG/L) (39530)	PARA-THION, TOTAL (UG/L) (39540)	DI-AZINON, TOTAL (UG/L) (39570)	METHYL PARA-THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PHENOLS TOTAL (UG/L) (32730)
NOV , 1982											
02...	--	--	--	--	--	--	--	--	--	--	<1
MAR , 1983											
01...	--	--	--	--	--	--	--	--	--	--	9
31...	--	--	--	--	--	--	--	--	--	--	--
APR											
06...	--	--	--	--	--	--	--	--	--	--	<1
MAY											
10...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	6
27...	--	--	--	--	--	--	--	--	--	--	--
AUG											
16...	--	--	--	--	--	--	--	--	--	--	<1
SEP											
08...	--	--	--	--	--	--	--	--	--	--	<1

WATER QUALITY DATA

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SULFIDE DIS-SOLVED (MG/L AS S) (00746)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137) (03515)
NOV , 1982											
02...	2.7	1	14	120	690	1400	170	--	47	.7	<8.8
MAR , 1983											
01...	7.0	--	13	100	627	1300	150	--	--	--	--
31...	2.7	--	13	120	--	1100	190	--	--	--	--
APR											
06...	2.4	--	14	120	702	1300	180	--	--	--	--
MAY											
10...	--	--	--	--	--	--	--	--	--	--	--
10...	2.7	3	15	61	--	780	120	--	4	120	<5.7
27...	2.5	--	10	57	--	220	95	--	--	--	--
AUG											
16...	2.4	--	16	100	--	--	190	--	--	--	--
SEP											
08...	2.2	--	15	110	--	1400	210	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306022 - STEWART GULCH AB WEST FORK NR RIO BLANCO, CO DISTRICT CODE 08

WATER QUALITY DATA

DATE	ALKA-LINITY FIELD (MG/L AS CACO3) (00410)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BICAR-BONATE FET-FLD (MG/L AS HCO3) (00440)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	CAR-BONATE FET-FLD (MG/L AS CO3) (00445)
NOV , 1982												
02...	--	10	.090	1	50	--	.8	80	<.01	<1	87	--
MAR , 1983												
01...	--	--	.080	1	--	--	--	80	--	--	83	--
APR												
06...	--	--	.100	1	--	--	--	80	--	--	83	--
MAY												
10...	--	--	--	--	--	--	.8	--	--	--	--	--
10...	--	20	.140	1	47	--	--	80	.02	<1	86	--
AUG												
16...	--	--	.060	<1	--	--	--	90	--	--	87	--
SEP												
08...	--	--	.060	2	--	--	--	90	--	--	92	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306022 - STEWART GULCH AB WEST FORK NR RIO BLANCO, CO DISTRICT CODE 08

WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	CYANIDE DIS-SOLVED (MG/L AS CN) (00723)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML) (31679)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
NOV , 1982											
02...	14	6.4	10	--	K210	1	--	--	.3	7	3
MAR , 1983											
01...	--	6.3	--	--	--	--	--	--	.5	4	--
APR											
06...	--	6.4	--	--	--	--	--	--	.3	18	--
MAY											
10...	--	--	--	--	K10	--	--	--	--	--	--
10...	<10	6.3	<10	--	--	1	--	--	.2	9	<1
AUG											
16...	--	7.2	--	--	--	--	--	--	.3	5	--
SEP											
08...	--	7.2	--	--	--	--	--	--	.2	8	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306022 - STEWART GULCH AB WEST FORK NR RIO BLANCO, CO DISTRICT CODE 08

WATER QUALITY DATA

DATE	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	OIL AND GREASE (MG/L) (00550)	CARBON, INORG + ORGANIC DIS- SOLVED (MG/L AS C) (00682)	CARBON, INOR- GANIC, DIS- SOLVED (MG/L AS C) (00691)
NOV , 1982											
02...	20	72	2	<.1	--	2	--	--	--	--	--
MAR , 1983											
01...	--	70	12	--	--	--	--	--	--	--	--
APR											
06...	--	71	3	--	--	--	--	--	--	--	--
MAY											
10...	--	--	--	--	--	--	--	--	--	--	--
10...	17	71	6	<.1	--	<1	--	--	--	--	--
AUG											
16...	--	72	5	--	--	--	--	--	--	--	--
SEP											
08...	--	71	3	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306022 - STEWART GULCH AB WEST FORK NR RIO BLANCO, CO DISTRICT CODE 08

WATER QUALITY DATA

DATE	CARBON, TOTAL (MG/L AS C) (00690)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR-DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI-ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX-APHENE, TOTAL (UG/L) (39400)
NOV , 1982											
02...	--	--	--	--	--	--	--	--	--	--	--
MAR , 1983											
01...	--	--	--	--	--	--	--	--	--	--	--
APR											
06...	--	--	--	--	--	--	--	--	--	--	--
MAY											
10...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
AUG											
16...	--	--	--	--	--	--	--	--	--	--	--
SEP											
08...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306022 - STEWART GULCH AB WEST FORK NR RIO BLANCO, CO DISTRICT CODE 08

WATER QUALITY DATA

DATE	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	PCB, TOTAL (UG/L) (39516)	MALA-THION, TOTAL (UG/L) (39530)	PARA-THION, TOTAL (UG/L) (39540)	DI-AZINON, TOTAL (UG/L) (39570)	METHYL PARA-THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PHENOLS TOTAL (UG/L) (32730)
NOV , 1982											
02...	--	--	--	--	--	--	--	--	--	--	1
MAR , 1983											
01...	--	--	--	--	--	--	--	--	--	--	4
APR											
06...	--	--	--	--	--	--	--	--	--	--	<1
MAY											
10...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	2
AUG											
16...	--	--	--	--	--	--	--	--	--	--	<1
SEP											
08...	--	--	--	--	--	--	--	--	--	--	2

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306022 - STEWART GULCH AB WEST FORK NR RIO BLANCO, CO DISTRICT CODE 08

WATER QUALITY DATA

DATE	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	SULFIDE DISSOLVED (MG/L AS S) (00746)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)
NOV , 1982											
02...	1.5	1	13	130	923	2700	350	--	7	--	<13
MAR , 1983											
01...	2.0	--	15	120	896	2600	340	--	--	--	--
APR											
06...	1.3	--	47	120	930	120	360	--	--	--	--
MAY											
10...	--	--	--	--	--	--	--	--	--	--	--
10...	1.1	1	16	120	--	2700	330	--	23	1.2	<10
AUG											
16...	1.5	--	16	130	--	--	360	--	--	--	--
SEP											
08...	1.3	--	15	130	--	2600	370	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306036 - SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	ALKALINITY FIELD (MG/L AS CACO3) (00410)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BICARBONATE FET-FLD (MG/L AS HCO3) (00440)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L) (00310)	BORON, DISSOLVED (UG/L AS B) (01020)	BROMIDE DISSOLVED (MG/L AS BR) (71870)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	CARBONATE FET-FLD (MG/L AS CO3) (00445)
MAR , 1983												
02...	--	70	.270	1	55	--	>6.9	20	<.01	<1	15	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306036 - SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	CYANIDE DIS-SOLVED (MG/L AS CN) (00723)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML) (31679)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
MAR , 1983											
02...	62	1.3	10	--	K24	8	--	--	<.1	46	<1

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306036 - SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	OIL AND GREASE (MG/L) (00550)	CARBON, INORG + ORGANIC DIS- SOLVED (MG/L AS C) (00682)	CARBON, INOR- GANIC, DIS- SOLVED (MG/L AS C) (00691)
MAR , 1983											
02...	<4	1.6	3	<.1	--	<1	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306036 - SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	CARBON, TOTAL (MG/L AS C) (00690)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX- APHENE, TOTAL (UG/L) (39400)
MAR , 1983											
02...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306036 - SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO.

PROCESS DATE 10/31/83
DISTRICT CODE 08

WATER QUALITY DATA

DATE	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	PCN, TOTAL (UG/L) (39516)	MALA-THION, TOTAL (UG/L) (39530)	PARA-THION, TOTAL (UG/L) (39540)	DI-AZINON, TOTAL (UG/L) (39570)	METHYL PARA-THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PHENOLS TOTAL (UG/L) (32730)
MAR , 1983											
02...	--	--	--	--	--	--	--	--	--	--	12

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306036 - SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO.

PROCESS DATE 10/31/83
DISTRICT CODE 08

WATER QUALITY DATA

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SULFIDE DIS- SOLVED (MG/L AS S) (00746)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)
MAR , 1983											
02...	4.3	<1	3.1	1.7	--	140	6.3	--	4	6.8	6.6

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306039 - COTTONWOOD GULCH NEAR RIO BLANCO, CO.

PROCESS DATE 10/31/83
DISTRICT CODE 08

WATER QUALITY DATA

DATE	ALKA-LINITY FIELD (MG/L AS CACO3) (00410)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BICAR-BONATE FET-FLD (MG/L AS HCO3) (00440)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	CAR-BONATE FET-FLD (MG/L AS CO3) (00445)
MAR , 1983												
02...	--	30	.280	1	120	--	>7.3	30	<.01	<1	38	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306039 - COTTONWOOD GULCH NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	CYANIDE DIS- SOLVED (MG/L AS CN) (00723)	STREP- TOCOCCI FECAL, (COLS. PER 100 ML) (31679)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
MAR , 1983											
02...	54	5.0	<10	--	K150	4	--	--	.2	17	<1

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306039 - COTTONWOOD GULCH NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	OIL AND GREASE (MG/L) (00550)	CARBON, INORG + ORGANIC DIS- SOLVED (MG/L AS C) (00682)	CARBON, INOR- GANIC, DIS- SOLVED (MG/L AS C) (00691)
MAR , 1983											
02...	13	19	5	<.1	--	1	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306039 - COTTONWOOD GULCH NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	CARBON, TOTAL (MG/L AS C) (00690)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR-DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI-ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX-APHENE, TOTAL (UG/L) (39400)
MAR , 1983											
02...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306039 - COTTONWOOD GULCH NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	PCB, TOTAL (UG/L) (39516)	MALA-THION, TOTAL (UG/L) (39530)	PARA-THION, TOTAL (UG/L) (39540)	DI-AZINON, TOTAL (UG/L) (39570)	METHYL PARA-THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PHENOLS TOTAL (UG/L) (32730)
MAR , 1983											
02...	--	--	--	--	--	--	--	--	--	--	7

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306039 - COTTONWOOD GULCH NEAR RIO BLANCO, CO.

PROCESS DATE 10/31/83
DISTRICT CODE 08

WATER QUALITY DATA

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SULFIDE DIS- SOLVED (MG/L AS S) (00746)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)
MAR , 1983											
02...	4.8	<1	6.8	35	--	1100	89	--	<3	1.8	9.9

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306042 - PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)
NOV , 1982												
02...	--	40	.170	1	400	--	1.5	730	<.01	<1	12	--
MAR , 1983												
01...	--	--	.140	1	--	--	--	630	--	--	8.7	--
31...	--	--	<.060	--	--	--	--	730	--	--	8.3	--
MAY												
10...	--	--	--	--	--	--	1.8	--	--	--	--	--
10...	--	40	.090	1	500	--	--	750	.01	<1	9.1	--
AUG												
16...	--	--	.080	2	--	--	--	760	--	--	8.4	--
SEP												
08...	--	--	.060	3	--	--	--	760	--	--	9.6	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306042 - PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	CYANIDE DIS-SOLVED (MG/L AS CN) (00723)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML) (31679)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
NOV , 1982											
02...	15	7.7	10	--	<8	24	--	--	24	30	5
MAR , 1983											
01...	--	6.5	--	--	--	--	--	--	16	54	--
31...	--	8.0	--	--	--	--	--	--	2.1	--	--
MAY											
10...	--	--	--	--	<10	--	--	--	--	--	--
10...	10	8.4	<10	--	--	2	--	--	21	20	<1
AUG											
16...	--	8.4	--	--	--	--	--	--	20	20	--
SEP											
08...	--	8.1	--	--	--	--	--	--	18	30	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306042 - PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	OIL AND GREASE (MG/L) (00550)	CARBON, INORG + ORGANIC DIS- SOLVED (MG/L AS C) (00682)	CARBON, INOR- GANIC, DIS- SOLVED (MG/L AS C) (00691)
NOV , 1982											
02...	40	7.5	<10	<.1	--	3	--	--	--	--	--
MAR , 1983											
01...	--	4.3	4	--	--	--	--	--	--	--	--
31...	--	6.1	--	--	--	--	--	--	--	--	--
MAY											
10...	--	--	--	--	--	--	--	--	--	--	--
10...	40	6.5	<10	<.1	--	<1	--	--	--	--	--
AUG											
16...	--	6.9	<10	--	--	--	--	--	--	--	--
SEP											
08...	--	7.1	<10	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306042 - PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	CARBON, TOTAL (MG/L AS C) (00690)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX- APHENE, TOTAL (UG/L) (39400)
NOV , 1982											
02...	--	--	--	--	--	--	--	--	--	--	--
MAR , 1983											
01...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
MAY											
10...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
AUG											
16...	--	--	--	--	--	--	--	--	--	--	--
SEP											
08...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306042 - PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	PCB, TOTAL (UG/L) (39516)	MALA-THION, TOTAL (UG/L) (39530)	PARA-THION, TOTAL (UG/L) (39540)	DI-AZINON, TOTAL (UG/L) (39570)	METHYL PARA-THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PHENOLS TOTAL (UG/L) (32730)
NOV , 1982											
02...	--	--	--	--	--	--	--	--	--	--	4
MAR , 1983											
01...	--	--	--	--	--	--	--	--	--	--	4
31...	--	--	--	--	--	--	--	--	--	--	--
MAY											
10...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	5
AUG											
16...	--	--	--	--	--	--	--	--	--	--	<1
SEP											
08...	--	--	--	--	--	--	--	--	--	--	<1

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306042 - PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	SULFIDE DISSOLVED (MG/L AS S) (00746)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)
NOV , 1982											
02...	1.6	<1	15	570	1380	1100	22	--	10	.6	<21
MAR , 1983											
01...	2.3	--	11	430	1080	720	21	--	--	--	--
31...	1.8	--	13	510	--	740	23	--	--	--	--
MAY											
10...	--	--	--	--	--	--	--	--	--	--	--
10...	1.5	<1	11	540	--	1000	26	--	<10	.4	<18
AUG											
16...	1.6	--	12	530	--	--	25	--	--	--	--
SEP											
08...	1.4	--	11	560	--	1100	23	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306052 - SCANDARD GULCH AT MOUTH, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	ALKA-LINITY FIELD (MG/L AS CACO3) (00410)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BICAR-BONATE FET-FLD (MG/L AS HCO3) (00440)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	CAR-BONATE FET-FLD (MG/L AS CO3) (00445)
MAR , 1983												
01...	--	110	.250	1	64	--	--	20	<.01	<1	18	--
02...	--	--	--	--	--	--	>7.3	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306052 - SCANDARD GULCH AT MOUTH, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	CYANIDE DIS- SOLVED (MG/L AS CN) (00723)	STREP- TOCOCCI FECAL, (COLS. PER 100 ML) (31679)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
MAR , 1983											
01...	120	2.3	<10	--	--	4	--	--	.1	99	<1
02...	--	--	--	--	K38	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306052 - SCANDARD GULCH AT MOUTH, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	METHYLENE BLUE ACTIVE SUB-STANCE (MG/L) (38260)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO) (01060)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	OIL AND GREASE (MG/L) (00550)	CARBON, INORG + ORGANIC DIS-SOLVED (MG/L AS C) (00682)	CARBON, INORGANIC, DIS-SOLVED (MG/L AS C) (00691)
MAR , 1983											
01...	4	1.8	4	<.1	--	<1	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306052 - SCANDARD GULCH AT MOUTH, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	CARBON, TOTAL (MG/L AS C) (00690)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX- APHENE, TOTAL (UG/L) (39400)
MAR , 1983											
01...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306052 - SCANDARD GULCH AT MOUTH, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	PCB, TOTAL (UG/L) (39516)	MALA-THION, TOTAL (UG/L) (39530)	PARA-THION, TOTAL (UG/L) (39540)	DI-AZINON, TOTAL (UG/L) (39570)	METHYL PARA-THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PHENOLS TOTAL (UG/L) (32730)
MAR , 1983											
01...	--	--	--	--	--	--	--	--	--	--	6
02...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306052 - SCANDARD GULCH AT MOUTH, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SULFIDE DIS-SOLVED (MG/L AS S) (00746)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137) (03515)
MAR , 1983											
01...	4.8	<1	5.0	3.7	--	140	8.1	--	<3	44	12
02...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306058 - WILLOW CREEK NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	ALKA-LINITY FIELD (MG/L AS CACO3) (00410)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BICAR-BONATE FET-FLD (MG/L AS HCO3) (00440)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	CAR-BONATE FET-FLD (MG/L AS CO3) (00445)
NOV , 1982												
02...	--	--	--	--	--	--	.4	--	--	--	--	--
03...	--	10	.090	1	67	--	.4	110	<.01	<1	92	--
MAR , 1983												
03...	--	--	.180	1	--	--	--	90	--	--	80	--
31...	--	--	<.060	--	--	--	--	100	--	--	89	--
APR												
07...	--	--	.120	1	--	--	--	100	--	--	87	--
MAY												
11...	--	--	--	--	--	--	.6	--	--	--	--	--
11...	--	10	.080	--	69	--	--	100	<.01	<1	90	--
AUG												
16...	--	--	.120	2	--	--	--	180	--	--	95	--
SEP												
08...	--	--	.040	1	--	--	--	150	--	--	99	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306058 - WILLOW CREEK NEAR RIO BLANCO, CO.

PROCESS DATE 10/31/83
DISTRICT CODE 08

WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	CYANIDE DIS-SOLVED (MG/L AS CN) (00723)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML) (31679)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
NOV , 1982											
02...	--	--	--	--	K96	--	--	--	--	--	--
03...	14	11	<10	--	K96	1	--	--	.4	7	1
MAR , 1983											
03...	--	10	--	--	--	--	--	--	.4	37	--
31...	--	12	--	--	--	--	--	--	.4	--	--
APR											
07...	--	12	--	--	--	--	--	--	.4	11	--
MAY											
11...	--	--	--	--	3400	--	--	--	--	--	--
11...	13	11	<10	--	--	<1	--	--	.3	--	<1
AUG											
16...	--	14	--	--	--	--	--	--	.5	9	--
SEP											
08...	--	14	--	--	--	--	--	--	.4	24	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306058 - WILLOW CREEK NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L) (38260)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	OIL AND GREASE (MG/L) (00550)	CARBON, INORG + ORGANIC DIS-SOLVED (MG/L AS C) (00682)	CARBON, INOR-GANIC, DIS-SOLVED (MG/L AS C) (00691)
NOV , 1982											
02...	--	--	--	--	--	--	--	--	--	--	--
03...	25	74	3	<.1	--	4	--	--	--	--	--
MAR , 1983											
03...	--	58	12	--	--	--	--	--	--	--	--
31...	--	70	--	--	--	--	--	--	--	--	--
APR											
07...	--	69	14	--	--	--	--	--	--	--	--
MAY											
11...	--	--	--	--	--	--	--	--	--	--	--
11...	16	69	--	<.1	--	3	--	--	--	--	--
AUG											
16...	--	78	34	--	--	--	--	--	--	--	--
SEP											
08...	--	77	41	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306058 - WILLOW CREEK NEAR RIO BLANCO, CO.

PROCESS DATE 10/31/83
DISTRICT CODE 08

WATER QUALITY DATA

DATE	CARBON, TOTAL (MG/L AS C) (00690)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX- APHENE, TOTAL (UG/L) (39400)
NOV , 1982											
02...	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--
MAR , 1983											
03...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
APR											
07...	--	--	--	--	--	--	--	--	--	--	--
MAY											
11...	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
AUG											
16...	--	--	--	--	--	--	--	--	--	--	--
SEP											
08...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306058 - WILLOW CREEK NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	PCB, TOTAL (UG/L) (39516)	MALA-THION, TOTAL (UG/L) (39530)	PARA-THION, TOTAL (UG/L) (39540)	DI-AZINON, TOTAL (UG/L) (39570)	METHYL PARA-THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PHENOLS TOTAL (UG/L) (32730)
NOV , 1982											
02...	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	<1
MAR , 1983											
03...	--	--	--	--	--	--	--	--	--	--	5
31...	--	--	--	--	--	--	--	--	--	--	--
APR											
07...	--	--	--	--	--	--	--	--	--	--	3
MAY											
11...	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
AUG											
16...	--	--	--	--	--	--	--	--	--	--	<1
SEP											
08...	--	--	--	--	--	--	--	--	--	--	<1

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306058 - WILLOW CREEK NEAR RIO BLANCO, CO.

PROCESS DATE 10/31/83
DISTRICT CODE 08

WATER QUALITY DATA

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SULFIDE DIS- SOLVED (MG/L AS S) (00746)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)
NOV , 1982											
02...	--	--	--	--	--	--	--	--	--	--	--
03...	1.9	1	15	120	919	3100	330	--	44	--	<12
MAR , 1983											
03...	4.0	--	13	93	743	2400	250	--	--	--	--
31...	1.4	--	13	110	845	2800	320	--	--	--	--
APR											
07...	1.4	--	15	110	--	2900	310	--	--	--	--
MAY											
11...	--	--	--	--	--	--	--	--	--	--	--
11...	1.5	2	14	110	--	2700	310	--	9	3.6	<9.7
AUG											
16...	3.4	--	20	140	--	--	370	--	--	--	--
SEP											
08...	2.0	--	18	130	--	3100	350	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306061 - PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	ALKALINITY FIELD (MG/L AS CACO3) (00410)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BICARBONATE FET-FLD (MG/L AS HCO3) (00440)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L) (00310)	BORON, DISSOLVED (UG/L AS B) (01020)	BROMIDE DISSOLVED (MG/L AS BR) (71870)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	CARBONATE FET-FLD (MG/L AS CO3) (00445)
NOV , 1982												
03...	--	10	<.060	2	110	--	.5	200	<.01	<1	69	--
MAR , 1983												
02...	--	--	.660	2	--	--	--	110	--	--	40	--
31...	--	--	<.060	--	--	--	--	150	--	--	74	--
APR												
07...	--	--	.140	2	--	--	--	160	--	--	77	--
MAY												
11...	--	--	--	--	--	--	4.5	--	--	--	--	--
11...	--	20	.090	3	97	--	--	90	.02	<1	57	--
27...	--	--	.060	--	--	--	--	80	--	--	59	--
AUG												
16...	--	--	.080	3	--	--	--	180	--	--	77	--
SEP												
08...	--	--	.040	1	--	--	--	180	--	--	74	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306061 - PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	CYANIDE DIS-SOLVED (MG/L AS CN) (00723)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML) (31679)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
NOV , 1982											
03...	13	17	<10	--	K32	2	--	--	1.6	12	1
MAR , 1983											
02...	--	11	--	--	--	--	--	--	.8	120	--
31...	--	14	--	--	--	--	--	--	.6	--	--
APR											
07...	--	15	--	--	--	--	--	--	.8	9	--
MAY											
11...	--	--	--	--	8400	--	--	--	--	--	--
11...	220	8.6	<10	--	--	3	--	--	.4	15	<1
27...	--	8.8	--	--	--	--	--	--	.4	--	--
AUG											
16...	--	15	--	--	--	--	--	--	.9	11	--
SEP											
08...	--	13	--	--	--	--	--	--	.4	10	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306061 - PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L) (38260)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	OIL AND GREASE (MG/L) (00550)	CARBON, INORG + ORGANIC DIS-SOLVED (MG/L AS C) (00682)	CARBON, INOR-GANIC, DIS-SOLVED (MG/L AS C) (00691)
NOV , 1982											
03...	26	56	53	<.1	--	7	--	--	--	--	--
MAR , 1983											
02...	--	29	120	--	--	--	--	--	--	--	--
31...	--	55	--	--	--	--	--	--	--	--	--
APR											
07...	--	57	27	--	--	--	--	--	--	--	--
MAY											
11...	--	--	--	--	--	--	--	--	--	--	--
11...	16	33	23	<.1	--	7	--	--	--	--	--
27...	--	31	--	--	--	--	--	--	--	--	--
AUG											
16...	--	55	16	--	--	--	--	--	--	--	--
SEP											
08...	--	60	11	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306061 - PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	CARBON, TOTAL (MG/L AS C) (00690)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR-DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI-ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX-APHENE, TOTAL (UG/L) (39400)
NOV , 1982											
03...	--	--	--	--	--	--	--	--	--	--	--
MAR , 1983											
02...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
APR											
07...	--	--	--	--	--	--	--	--	--	--	--
MAY											
11...	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
AUG											
16...	--	--	--	--	--	--	--	--	--	--	--
SEP											
08...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306061 - PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	PCB, TOTAL (UG/L) (39516)	MALA-THION, TOTAL (UG/L) (39530)	PARA-THION, TOTAL (UG/L) (39540)	DI-AZINON, TOTAL (UG/L) (39570)	METHYL PARA-THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PHENOLS TOTAL (UG/L) (32730)
NOV , 1982											
03...	--	--	--	--	--	--	--	--	--	--	<1
MAR , 1983											
02...	--	--	--	--	--	--	--	--	--	--	10
31...	--	--	--	--	--	--	--	--	--	--	--
APR											
07...	--	--	--	--	--	--	--	--	--	--	3
MAY											
11...	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	3
27...	--	--	--	--	--	--	--	--	--	--	--
AUG											
16...	--	--	--	--	--	--	--	--	--	--	<1
SEP											
08...	--	--	--	--	--	--	--	--	--	--	1

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306061 - PICEANCE CREEK AB HUNTER C, NEAR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SULFIDE DIS- SOLVED (MG/L AS S) (00746)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)
NOV , 1982											
03...	2.3	1	15	150	842	1900	240	--	5	--	<13
MAR , 1983											
02...	7.1	--	11	75	--	1100	120	--	--	--	--
31...	2.4	--	15	130	--	1800	220	--	--	--	--
APR											
07...	2.5	--	15	130	810	1900	250	--	--	--	--
MAY											
11...	--	--	--	--	--	--	--	--	--	--	--
11...	2.8	3	15	67	--	880	120	--	8	120	<5.6
27...	2.7	--	14	62	--	840	140	--	--	--	--
AUG											
16...	2.8	--	17	130	--	--	230	--	--	--	--
SEP											
08...	2.2	--	16	130	--	2100	290	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306200 - PICEANCE CREEK BL RYAN GULCH, NR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)
DEC , 1982												
16...	--	--	<.060	--	--	--	--	190	--	--	74	--
MAR , 1983												
02...	--	--	.400	--	--	--	--	100	--	--	47	--
31...	--	--	.090	--	--	--	--	60	--	--	80	--
APR												
07...	--	--	.100	--	--	--	--	160	--	--	84	--
MAY												
12...	--	--	.120	3	94	--	--	90	--	--	61	--
27...	--	--	.060	--	--	--	--	80	--	--	65	--
AUG												
01...	--	--	.050	--	--	--	--	180	--	--	76	--
17...	--	--	.070	--	--	--	--	180	--	--	81	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306200 - PICEANCE CREEK BL RYAN GULCH, NR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	CYANIDE DIS-SOLVED (MG/L AS CN) (00723)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML) (31679)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
DEC , 1982											
16...	--	14	--	--	--	--	--	--	1.2	--	--
MAR , 1983											
02...	--	11	--	--	--	--	--	--	.6	--	--
31...	--	22	--	--	--	--	--	--	.2	--	--
APR											
07...	--	21	--	--	--	--	--	--	.7	--	--
MAY											
12...	--	11	--	--	--	--	--	--	.5	18	--
27...	--	9.8	--	--	--	--	--	--	.4	--	--
AUG											
01...	--	15	--	--	--	--	--	--	.7	--	--
17...	--	15	--	--	--	--	--	--	.7	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306200 - PICEANCE CREEK BL RYAN GULCH, NR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	OIL AND GREASE (MG/L) (00550)	CARBON, INORG + ORGANIC DIS- SOLVED (MG/L AS C) (00682)	CARBON, INOR- GANIC, DIS- SOLVED (MG/L AS C) (00691)
DEC , 1982											
16...	--	70	--	--	--	--	--	--	--	--	--
MAR , 1983											
02...	--	34	--	--	--	--	1.0	.07	--	--	--
31...	--	40	--	--	--	--	--	--	--	--	--
APR											
07...	--	69	--	--	--	--	--	--	--	--	--
MAY											
12...	20	39	26	--	--	11	--	--	--	--	--
27...	--	37	--	--	--	--	--	--	--	--	--
AUG											
01...	--	66	--	--	--	--	--	--	--	--	--
17...	--	67	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306200 - PICEANCE CREEK BL RYAN GULCH, NR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	CARBON, TOTAL (MG/L AS C) (00690)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX- APHENE, TOTAL (UG/L) (39400)
DEC , 1982											
16...	--	.06	--	--	--	--	--	--	--	--	--
MAR , 1983											
02...	--	.28	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
APR											
07...	--	--	--	--	--	--	--	--	--	--	--
MAY											
12...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
AUG											
01...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306200 - PICEANCE CREEK BL RYAN GULCH, NR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	PCB, TOTAL (UG/L) (39516)	MALA-THION, TOTAL (UG/L) (39530)	PARA-THION, TOTAL (UG/L) (39540)	DI-AZINON, TOTAL (UG/L) (39570)	METHYL PARA-THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PHENOLS TOTAL (UG/L) (32730)
DEC , 1982											
16...	--	--	--	--	--	--	--	--	--	--	--
MAR , 1983											
02...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
APR											
07...	--	--	--	--	--	--	--	--	--	--	--
MAY											
12...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
AUG											
01...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306200 - PICEANCE CREEK BL RYAN GULCH, NR RIO BLANCO, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SULFIDE DIS-SOLVED (MG/L AS S) (00746)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137) (03515)
DEC , 1982											
16...	2.1	--	16	160	956	2700	310	--	--	--	--
MAR , 1983											
02...	5.8	--	12	78	496	1400	140	--	--	--	--
31...	3.3	--	14	130	--	680	230	--	--	--	--
APR											
07...	2.4	--	16	150	918	2600	300	--	--	--	--
MAY											
12...	2.8	--	15	73	--	1100	170	--	7	--	--
27...	2.6	--	14	65	--	1200	170	--	--	--	--
AUG											
01...	2.7	--	17	140	--	2300	300	--	--	--	--
17...	2.7	--	17	140	--	2400	310	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306222 - PICEANCE CREEK AT WHITE RIVER, CO DISTRICT CODE 08

WATER QUALITY DATA

DATE	ALKA-LINITY FIELD (MG/L AS CACO3) (00410)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BICAR-BONATE FET-FLD (MG/L AS HCO3) (00440)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	CAR-BONATE FET-FLD (MG/L AS CO3) (00445)
DEC , 1982												
16...	--	--	.150	--	--	--	--	240	--	--	67	--
MAR , 1983												
01...	--	--	.350	--	--	--	--	150	--	--	45	--
31...	--	--	.120	--	--	--	--	250	--	--	69	--
MAY												
04...	--	--	.100	3	110	--	--	140	--	--	60	--
12...	--	--	.180	--	--	--	--	120	--	--	56	--
27...	--	--	.080	--	--	--	--	110	--	--	59	--
AUG												
01...	--	--	.060	--	--	--	--	210	--	--	67	--
17...	--	--	.090	--	--	--	--	210	--	--	69	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306222 - PICEANCE CREEK AT WHITE RIVER, CO

PROCESS DATE 10/31/83
DISTRICT CODE 08

WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	CYANIDE DIS-SOLVED (MG/L AS CN) (00723)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML) (31679)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
DEC , 1982											
16...	--	28	--	--	--	--	--	--	1.5	--	--
MAR , 1983											
01...	--	26	--	--	--	--	--	--	.8	--	--
31...	--	35	--	--	--	--	--	--	.9	--	--
MAY											
04...	--	16	--	--	--	--	--	--	.6	6	--
12...	--	14	--	--	--	--	--	--	.5	--	--
27...	--	11	--	--	--	--	--	--	.5	--	--
AUG											
01...	--	19	--	--	--	--	--	--	.7	--	--
17...	--	19	--	--	--	--	--	--	.7	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306222 - PICEANCE CREEK AT WHITE RIVER, CO DISTRICT CODE 08

WATER QUALITY DATA

DATE	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L) (38260)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	OIL AND GREASE (MG/L) (00550)	CARBON, INORG + ORGANIC DIS-SOLVED (MG/L AS C) (00682)	CARBON, INOR-GANIC, DIS-SOLVED (MG/L AS C) (00691)
DEC , 1982											
16...	--	71	--	--	--	--	--	--	--	--	--
MAR , 1983											
01...	--	34	--	--	--	--	1.6	.07	--	--	--
31...	--	72	--	--	--	--	--	--	--	--	--
MAY											
04...	23	46	14	--	--	10	--	--	--	--	--
12...	--	43	--	--	--	--	--	--	--	--	--
27...	--	40	--	--	--	--	--	--	--	--	--
AUG											
01...	--	63	--	--	--	--	--	--	--	--	--
17...	--	64	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306222 - PICEANCE CREEK AT WHITE RIVER, CO DISTRICT CODE 08

WATER QUALITY DATA

DATE	CARBON, TOTAL (MG/L AS C) (00690)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX- APHENE, TOTAL (UG/L) (39400)
DEC , 1982											
16...	--	.09	--	--	--	--	--	--	--	--	--
MAR , 1983											
01...	--	.34	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
MAY											
04...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
AUG											
01...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306222 - PICEANCE CREEK AT WHITE RIVER, CO

PROCESS DATE 10/31/83
DISTRICT CODE 08

WATER QUALITY DATA

DATE	HEPTA- CHLOR, TOTAL (UG/L) (39410)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	PCB, TOTAL (UG/L) (39516)	MALA- THION, TOTAL (UG/L) (39530)	PARA- THION, TOTAL (UG/L) (39540)	DI- AZINON, TOTAL (UG/L) (39570)	METHYL PARA- THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PHENOLS TOTAL (UG/L) (32730)
DEC , 1982											
16...	--	--	--	--	--	--	--	--	--	--	--
MAR , 1983											
01...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
MAY											
04...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
AUG											
01...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306222 - PICEANCE CREEK AT WHITE RIVER, CO

PROCESS DATE 10/31/83
DISTRICT CODE 08

WATER QUALITY DATA

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SFLE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SULFIDE DIS-SOLVED (MG/L AS S) (00746)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137) (03515)
DEC , 1982											
16...	2.2	--	16	260	1160	2500	330	--	--	--	--
MAR , 1983											
01...	5.1	--	12	170	702	1200	160	--	--	--	--
31...	2.8	--	15	270	--	2300	340	--	--	--	--
MAY											
04...	2.9	--	16	130	--	1300	200	--	4	--	--
12...	2.9	--	15	110	--	1100	190	--	--	--	--
27...	3.2	--	15	91	--	1300	190	--	--	--	--
AUG											
01...	2.8	--	16	170	--	2000	310	--	--	--	--
17...	2.8	--	17	180	--	2100	300	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 11/01/83
09306224 - WHITE R AB CROOKED WASH NR WHITE RIVER CITY, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	ALKA-LINITY FIELD (MG/L AS CACO3) (00410)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BICAR-BONATE FET-FLD (MG/L AS HCO3) (00440)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	CAR-BONATE FET-FLD (MG/L AS CO3) (00445)
NOV , 1982												
09...	--	--	<.060	1	36	--	--	30	--	<1	61	--
JAN , 1983												
21...	--	--	--	--	--	--	--	30	--	--	63	--
MAR												
28...	--	--	.070	--	--	--	--	50	--	--	66	--
MAY												
20...	--	--	--	--	--	--	--	50	--	--	64	--
AUG												
30...	--	--	.040	--	--	--	--	60	--	--	55	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 11/01/83
09306224 - WHITE R AB CROOKED WASH NR WHITE RIVER CITY, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	CYANIDE DIS-SOLVED (MG/L AS CN) (00723)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML) (31679)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
NOV , 1982											
09...	--	11	<10	--	--	2	--	--	.2	16	<1
JAN , 1983											
21...	--	13	--	--	--	--	--	--	.3	--	--
MAR											
28...	--	16	--	--	--	--	--	--	.3	--	--
MAY											
20...	--	12	--	--	--	--	--	--	.2	--	--
AUG											
30...	--	12	--	--	--	--	--	--	.4	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 11/01/83
09306224 - WHITE R AB CROOKED WASH NR WHITE RIVER CITY, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L) (38260)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	OIL AND GREASE (MG/L) (00550)	CARBON, INORG + ORGANIC DIS-SOLVED (MG/L AS C) (00682)	CARBON, INOR-GANIC, DIS-SOLVED (MG/L AS C) (00691)
NOV , 1982											
09...	--	20	7	<.1	--	<1	--	.07	--	--	--
JAN , 1983											
21...	--	20	--	--	--	--	--	--	--	--	--
MAR											
28...	--	27	--	--	--	--	--	--	--	--	--
MAY											
20...	--	29	--	--	--	--	--	--	--	--	--
AUG											
30...	--	24	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 11/01/83
09306224 - WHITE R AB CROOKED WASH NR WHITE RIVER CITY, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	CARBON, TOTAL (MG/L AS C) (00690)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR-DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI-ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX-APHENE, TOTAL (UG/L) (39400)
NOV , 1982											
09...	--	--	--	--	--	--	--	--	--	--	--
JAN , 1983											
21...	--	--	--	--	--	--	--	--	--	--	--
MAR											
28...	--	--	--	--	--	--	--	--	--	--	--
MAY											
20...	--	--	--	--	--	--	--	--	--	--	--
AUG											
30...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 11/01/83
09306224 - WHITE R AB CROOKED WASH NR WHITE RIVER CITY, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	SULFIDE DISSOLVED (MG/L AS S) (00746)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)
NOV , 1982											
09...	1.3	1	13	34	364	730	120	--	5	--	--
JAN , 1983											
21...	1.5	--	15	35	382	740	130	--	--	--	--
MAR											
28...	1.4	--	12	54	--	830	190	--	--	--	--
MAY											
20...	2.3	--	13	49	--	810	170	--	--	--	--
AUG											
30...	1.8	--	14	50	--	810	140	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 11/01/83
09306224 - WHITE R AB CROOKED WASH NR WHITE RIVER CITY, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	HEPTA- CHLOR, TOTAL (UG/L) (39410)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	PCB, TOTAL (UG/L) (39516)	MALA- THION, TOTAL (UG/L) (39530)	PARA- THION, TOTAL (UG/L) (39540)	DI- AZINON, TOTAL (UG/L) (39570)	METHYL PARA- THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PHENOLS TOTAL (UG/L) (32730)
NOV , 1982											
09...	--	--	--	--	--	--	--	--	--	--	--
JAN , 1983											
21...	--	--	--	--	--	--	--	--	--	--	--
MAR											
28...	--	--	--	--	--	--	--	--	--	--	--
MAY											
20...	--	--	--	--	--	--	--	--	--	--	--
AUG											
30...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306255 - YELLOW CREEK NEAR WHITE RIVER, CO.

PROCESS DATE 10/31/83
DISTRICT CODE 08

WATER QUALITY DATA

DATE	ALKA-LINITY FIELD (MG/L AS CACO3) (00410)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BICAR-BONATE FET-FLD (MG/L AS HCO3) (00440)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	CAR-BONATE FET-FLD (MG/L AS CO3) (00445)
AUG , 1983												
10...	--	--	.060	5	100	--	--	500	--	--	51	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306255 - YELLOW CREEK NEAR WHITE RIVER, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	CYANIDE DIS-SOLVED (MG/L AS CN) (00723)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML) (31679)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
AUG , 1983											
10...	--	75	--	--	--	--	--	--	1.6	40	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306255 - YELLOW CREEK NEAR WHITE RIVER, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	OIL AND GREASE (MG/L) (00550)	CARBON, INORG + ORGANIC DIS- SOLVED (MG/L AS C) (00682)	CARBON, INOR- GANIC, DIS- SOLVED (MG/L AS C) (00691)
AUG , 1983											
10...	10	95	10	--	--	31	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306255 - YELLOW CREEK NEAR WHITE RIVER, CO.

PROCESS DATE 10/31/83
DISTRICT CODE 08

WATER QUALITY DATA

DATE	CARBON, TOTAL (MG/L AS C) (00690)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR-DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI-ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX-APHENE, TOTAL (UG/L) (39400)
AUG , 1983											
10...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 10/31/83
09306255 - YELLOW CREEK NEAR WHITE RIVER, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	PCB, TOTAL (UG/L) (39516)	MALA-THION, TOTAL (UG/L) (39530)	PARA-THION, TOTAL (UG/L) (39540)	DI-AZINON, TOTAL (UG/L) (39570)	METHYL PARA-THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PHENOLS TOTAL (UG/L) (32730)
AUG , 1983											
10...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306255 - YELLOW CREEK NEAR WHITE RIVER, CO.

PROCESS DATE 10/31/83
DISTRICT CODE 08

WATER QUALITY DATA

DATE	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	SULFIDE DISSOLVED (MG/L AS S) (00746)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)
AUG , 1983											
10...	2.5	--	13	500	--	2900	550	--	<10	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 11/01/83
09306290 - WHITE RIVER BELOW BOISE CREEK, NEAR RANGELY, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	ALKA-LINITY FIELD (MG/L AS CACO3) (00410)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BICAR-BONATE FET-FLD (MG/L AS HCO3) (00440)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	CAR-BONATE FET-FLD (MG/L AS CO3) (00445)
NOV , 1982												
09...	--	--	.060	1	40	--	--	40	--	<1	62	--
DEC												
16...	--	--	--	--	--	--	--	40	--	--	65	--
JAN , 1983												
20...	--	--	--	--	--	--	--	40	--	--	62	--
MAR												
07...	--	--	--	--	--	--	--	60	--	--	57	--
MAY												
04...	--	--	--	--	--	--	--	80	--	--	65	--
20...	--	--	--	--	--	--	--	60	--	--	60	--
JUN												
16...	--	--	.110	1	41	--	--	30	--	<1	47	--
AUG												
30...	--	--	--	--	--	--	--	50	--	--	66	--
SEP												
14...	--	--	--	--	--	--	--	60	--	--	65	--

UNITED STATES OEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS OATE 11/01/83
09306290 - WHITE RIVER BELOW BOISE CREEK, NEAR RANGELY, CO. DISTRICT COOE 08

WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	CHLO-RIOE, DIS-SOLVEO (MG/L AS CL) (00940)	CHRO-MIUM, DIS-SOLVEO (UG/L AS CR) (01030)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI-FORM, TOTAL, IMMEO. (COLS. PER 100 ML) (31501)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	CYANIDE OIS-SOLVEO (MG/L AS CN) (00723)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML) (31679)	FLUO-RIOE, DIS-SOLVED (MG/L AS F) (00950)	IRON, OIS-SOLVEO (UG/L AS FE) (01046)	LEAO, DIS-SOLVEO (UG/L AS PB) (01049)
NOV , 1982											
09...	--	12	<10	--	--	2	--	--	.2	18	3
DEC											
16...	--	14	--	--	--	--	--	--	.3	--	--
JAN , 1983											
20...	--	13	--	--	--	--	--	--	.3	11	--
MAR											
07...	--	17	--	--	--	--	--	--	.3	56	--
MAY											
04...	--	14	--	--	--	--	--	--	.3	6	--
20...	--	12	--	--	--	--	--	--	.3	13	--
JUN											
16...	--	5.2	<10	--	--	10	--	--	.2	27	1
AUG											
30...	--	14	--	--	--	--	--	--	.3	16	--
SEP											
14...	--	13	--	--	--	--	--	--	.3	21	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 11/01/83
09306290 - WHITE RIVER BELOW BOISE CREEK, NEAR RANGELY, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	OIL AND GREASE (MG/L) (00550)	CARBON, INORG + ORGANIC DIS- SOLVED (MG/L AS C) (00682)	CARBON, INOR- GANIC, DIS- SOLVED (MG/L AS C) (00691)
NOV , 1982											
09...	--	21	7	<.1	--	<1	--	--	--	--	--
DEC											
16...	--	22	--	--	--	--	--	--	--	--	--
JAN , 1983											
20...	--	19	--	--	--	--	--	--	--	--	--
MAR											
07...	--	23	--	--	--	--	--	--	--	--	--
MAY											
04...	--	32	--	--	--	--	--	--	--	--	--
20...	--	30	--	--	--	--	--	--	--	--	--
JUN											
16...	--	15	9	<.1	--	3	--	--	--	--	--
AUG											
30...	--	26	--	--	--	--	--	--	--	--	--
SEP											
14...	--	29	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 11/01/83
09306290 - WHITE RIVER BELOW BOISE CREEK, NEAR RANGELY, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	CARBON, TOTAL (MG/L AS C) (00690)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR-DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI-ELDRIN TOTAL (UG/L) (39380)	ENDRIN, TOTAL (UG/L) (39390)	TOX-APHENE, TOTAL (UG/L) (39400)
NOV , 1982											
09...	--	--	--	--	--	--	--	--	--	--	--
DEC											
15...	--	--	--	--	--	--	--	--	--	--	--
JAN , 1983											
20...	--	--	--	--	--	--	--	--	--	--	--
MAR											
07...	--	--	--	--	--	--	--	--	--	--	--
MAY											
04...	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
JUN											
16...	--	--	--	--	--	--	--	--	--	--	--
AUG											
30...	--	--	--	--	--	--	--	--	--	--	--
SEP											
14...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 11/01/83
09306290 - WHITE RIVER BELOW BOISE CREEK, NEAR RANGELY, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	PCB, TOTAL (UG/L) (39516)	MALA-THION, TOTAL (UG/L) (39530)	PARA-THION, TOTAL (UG/L) (39540)	DI-AZINON, TOTAL (UG/L) (39570)	METHYL PARA-THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PHENOLS TOTAL (UG/L) (32730)
NOV , 1982											
09...	--	--	--	--	--	--	--	--	--	--	--
DEC											
16...	--	--	--	--	--	--	--	--	--	--	--
JAN , 1983											
20...	--	--	--	--	--	--	--	--	--	--	--
MAR											
07...	--	--	--	--	--	--	--	--	--	--	--
MAY											
04...	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
JUN											
16...	--	--	--	--	--	--	--	--	--	--	--
AUG											
30...	--	--	--	--	--	--	--	--	--	--	--
SEP											
14...	--	--	--	--	--	--	--	--	--	--	--

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 11/01/83
09306290 - WHITE RIVER BELOW BOISE CREEK, NEAR RANGELY, CO. DISTRICT CODE 08

WATER QUALITY DATA

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SULFIDE DIS-SOLVED (MG/L AS S) (00746)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) (01516)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137) (03515)
NOV , 1982											
09...	1.3	1	13	39	384	750	130	--	19	--	--
DEC											
16...	1.2	--	14	44	413	770	140	--	--	--	--
JAN , 1983											
20...	1.4	--	14	35	379	720	130	--	--	--	--
MAR											
07...	3.7	--	13	65	462	660	170	--	--	--	--
MAY											
04...	2.4	--	12	75	--	790	200	--	--	--	--
20...	2.3	--	.1	57	--	740	180	--	--	--	--
JUN											
16...	1.4	1	13	21	--	420	76	--	<3	--	--
AUG											
30...	1.4	--	15	42	--	810	150	--	--	--	--
SEP											
14...	1.6	--	13	51	--	890	170	--	--	--	--

TABLE 1.2.2.1-3

Remark Codes for USGS Water Quality Data

CHARACTER	REMARK
E	Estimated Value
<	Actual value is known to be less than value shown
>	Actual value is known to be greater than value shown
M	Presence of material verified but not quantified
N	Presumptive evidence of presence of material
ND	Material specifically analyzed for but not detected
K	Results based on colony count outside the acceptable range (non-ideal colony count)

1.2.2.2 Spring and Seeps

Locations of springs and seeps on and around the C-b Tract are shown in Figure 1.2.1.2-1 of Section 1.2.1.2.

Water quality samples were not taken during this report period (June through November 1983).

During this report period water samples of pH or conductivity remained between the 20% range for these baseline values. If a sample should be have been taken, parameters were to be analyzed as followed by the DMP quarterly schedule, Table 1.2.2.2-1.

TABLE 1.2.2.2-1

Parameters Analyzed During IMP - Springs

Ag	Mo	Ca	TDS
AS	Cl	Mg	SO_4
Ba	Li	Fluoride	CO_3
Cd	Al	B	HCO_3
Cr	Sr	Ni	NO_3
Cu	Se	Oil & Grease	Alkalinity
Fe	Zn	Temperature	Hardness
Hg	pH	Kjeldahl-N	Phenols
Mn	Na	COD	Ammonia
Pb	K	BOD	DOC Fraction

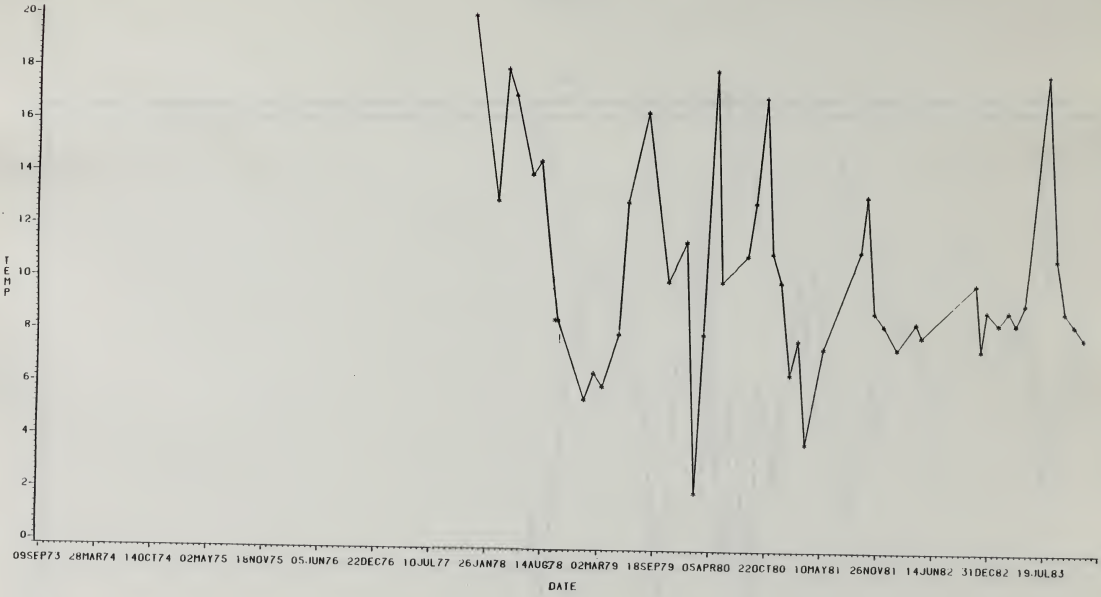
Time series plots of temperature, pH and specific conductance are displayed in this section. Dashed lines on the pH and specific conductance plots represent the baseline mean. These plots can be referenced with Table 1.2.2.2-2.

TABLE 1.2.2.2-2

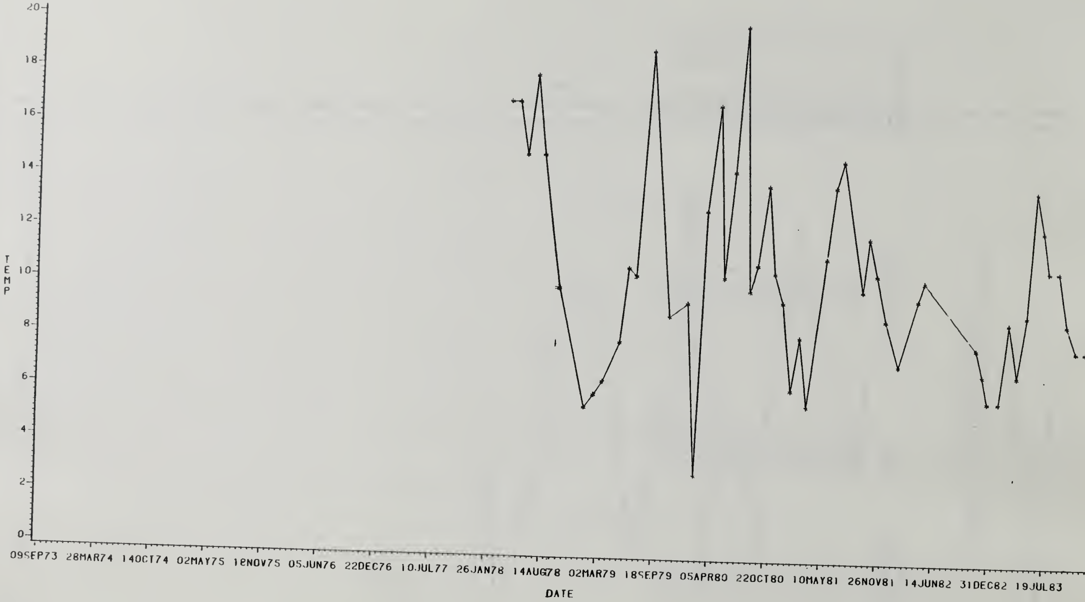
Parameter List of Springs and Seeps Time Series Plots

Station Code		Temperature	pH	Specific Conductance	Field Fluoride
S-1	WS01	I-451	I-463	I-475	
S-2	WS02	I-452	I-464	I-476	
S-4	WS04	I-453	I-465	I-477	
S-6	WS06	I-454	I-466	I-478	
S-7	WS07	I-455	I-467	I-479	I-487
S-8	WS08	I-456	I-468	I-480	
S-9	WS09	I-457	I-469	I-481	
S-10	WS10	I-458	I-470	I-482	
SEEPA	WS11	I-459	I-471	I-483	
S-102	WS12	I-460	I-472	I-484	I-488
S-102A	WS13	I-461	I-473	I-485	I-489
S-11	WS36	I-462	I-474	I-486	

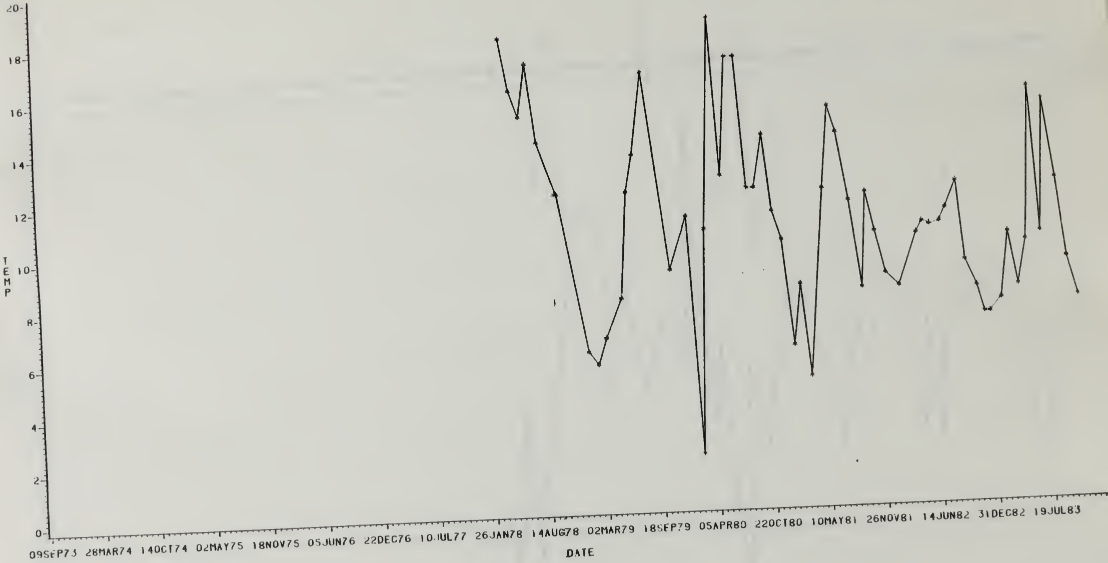
TIME SERIES PLOT OF TEMPERATURE FOR SPRINGS AND SEEPS
LOC=WS01



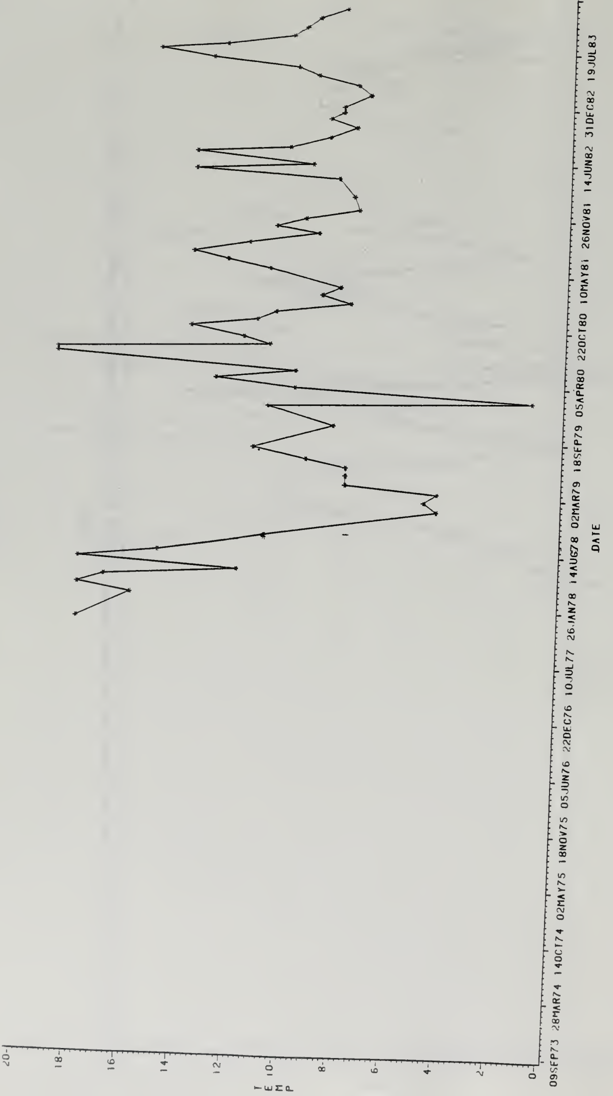
TIME SERIES PLOT OF TEMPERATURE FOR SPRINGS AND SEEPS
LOC=WS02



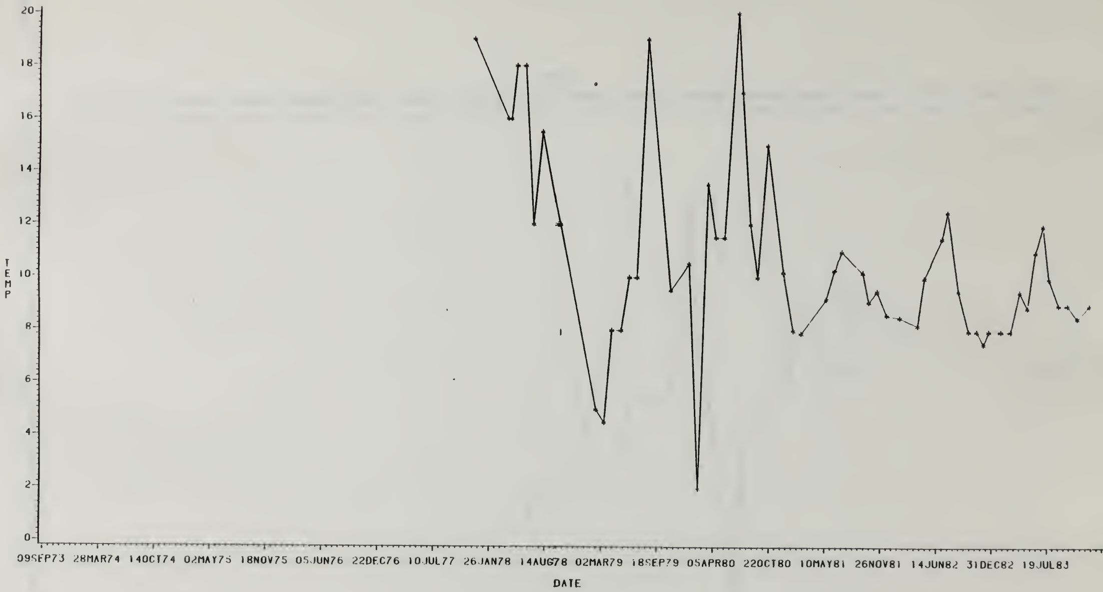
TIME SERIES PLOT OF TEMPERATURE FOR SPRINGS AND SEEPS
LOC=WS04



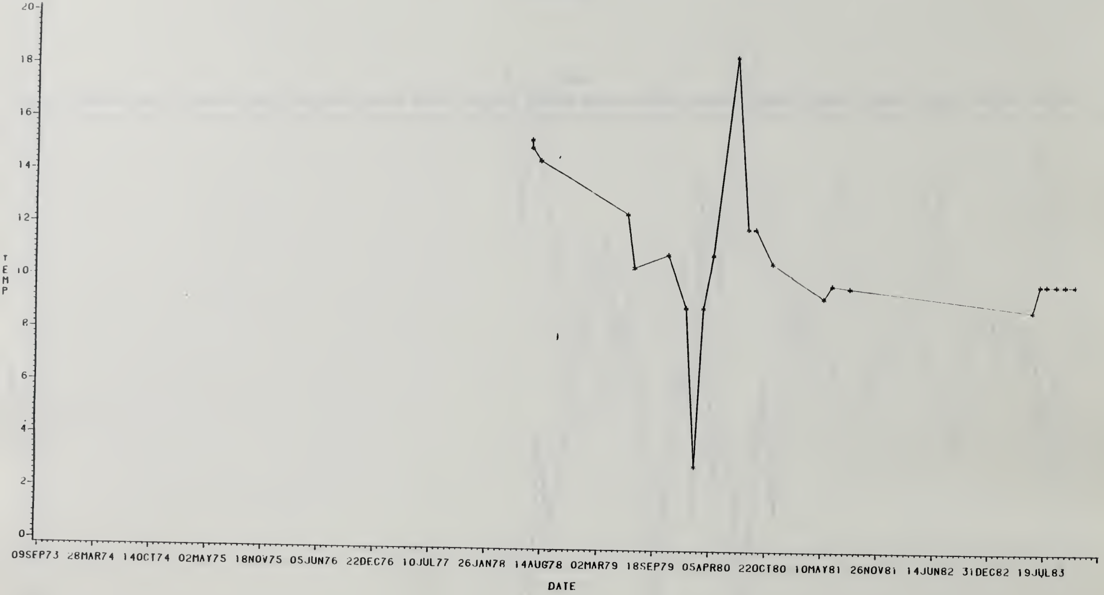
# TIME SERIES PLOT OF TEMPERATURE FOR SPRINGS AND SEEPS
LOC=WS06



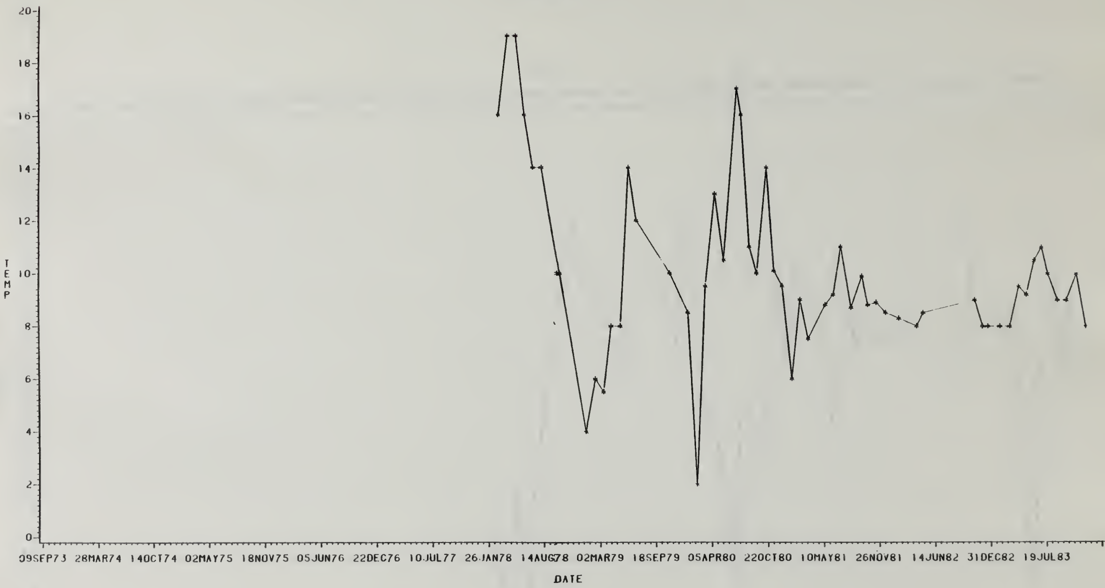
TIME SERIES PLOT OF TEMPERATURE FOR SPRINGS AND SEEPS
LOC=WS07



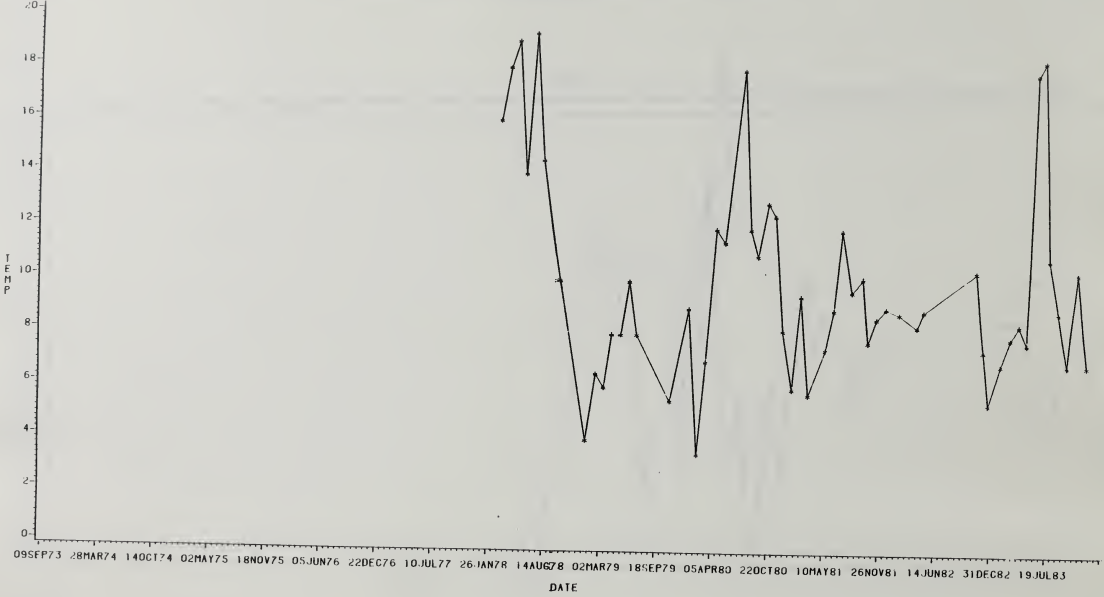
TIME SERIES PLOT OF TEMPERATURE FOR SPRINGS AND SEEPS
LOC-WS08



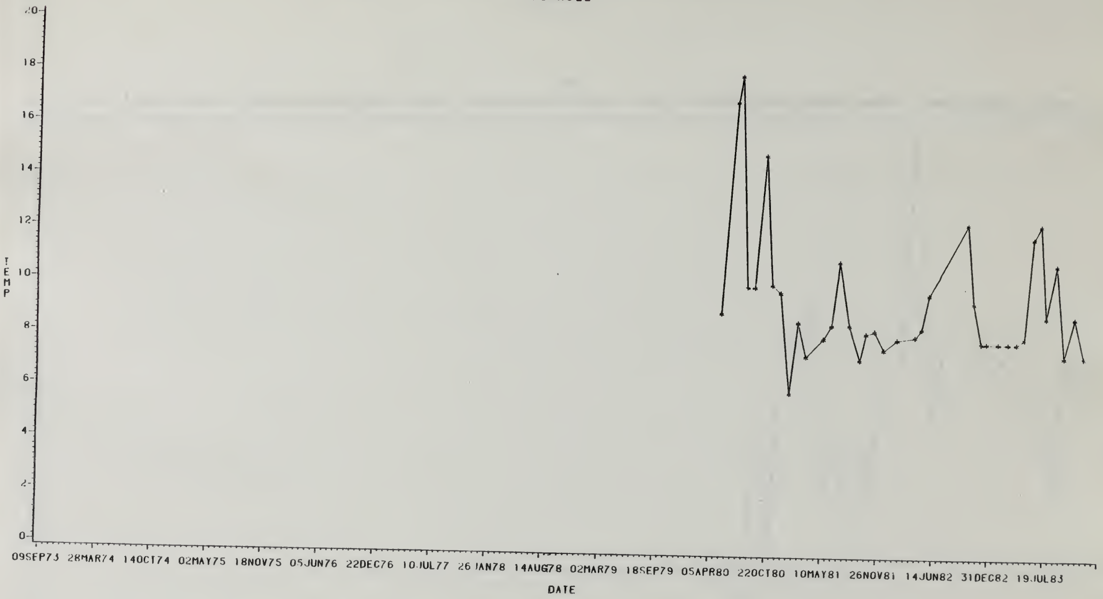
TIME SERIES PLOT OF TEMPERATURE FOR SPRINGS AND SEEPS
LOC=WS09



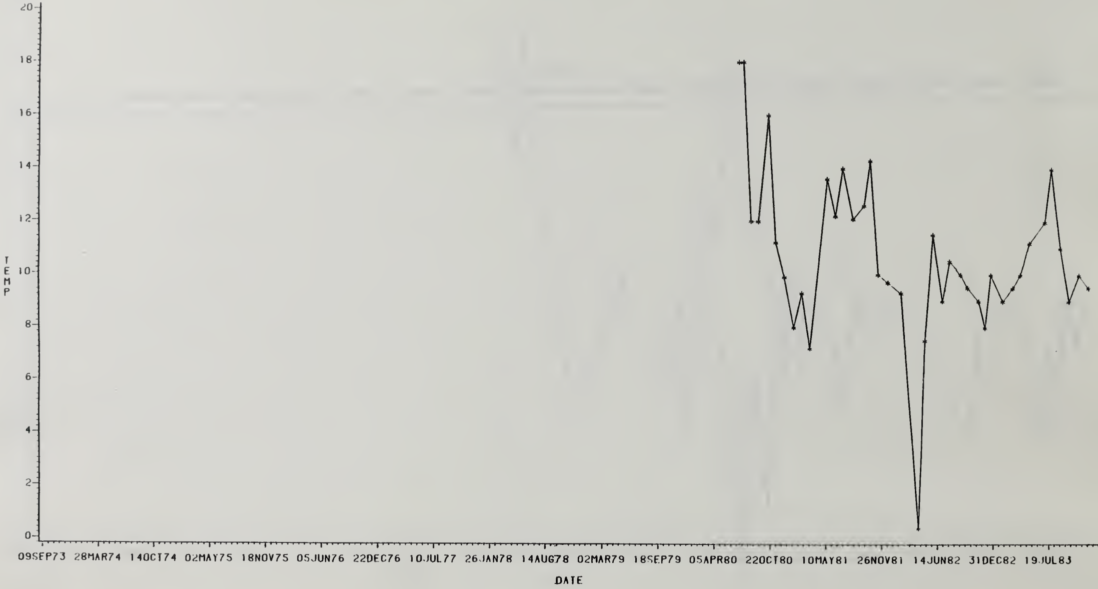
TIME SERIES PLOT OF TEMPERATURE FOR SPRINGS AND SEEPS
LOC=WS10



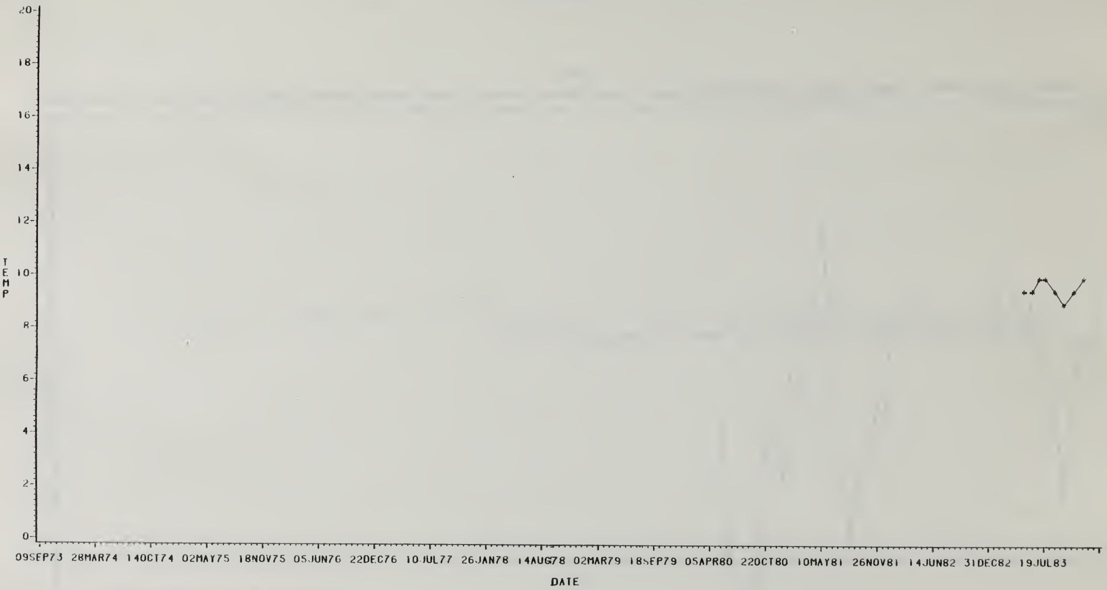
# TIME SERIES PLOT OF TEMPERATURE FOR SPRINGS AND SEEPS
LOC=WS11



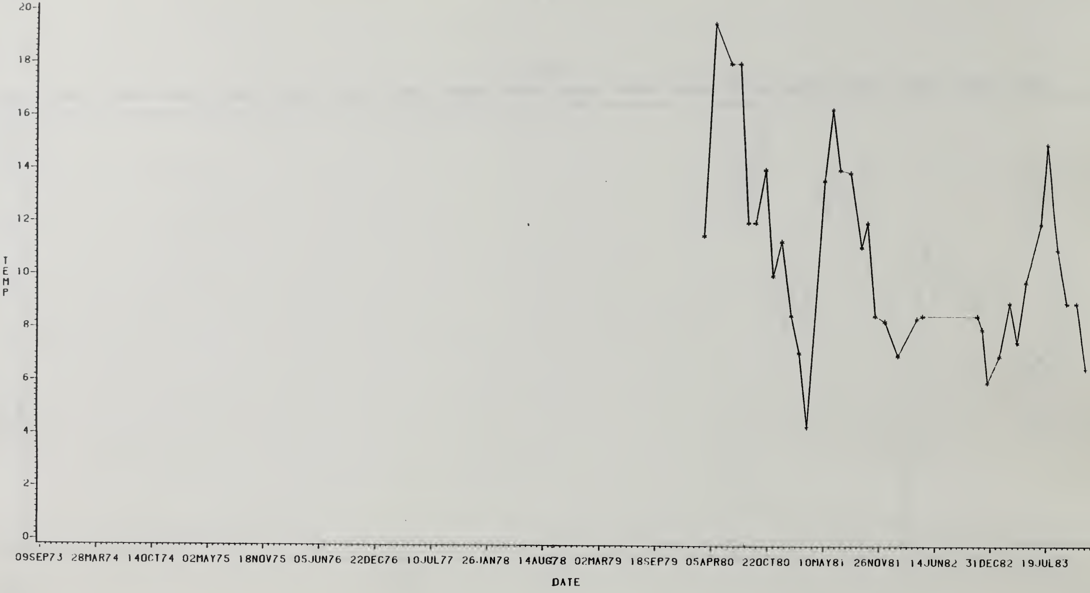
TIME SERIES PLOT OF TEMPERATURE FOR SPRINGS AND SEEPS
LOC=WS12



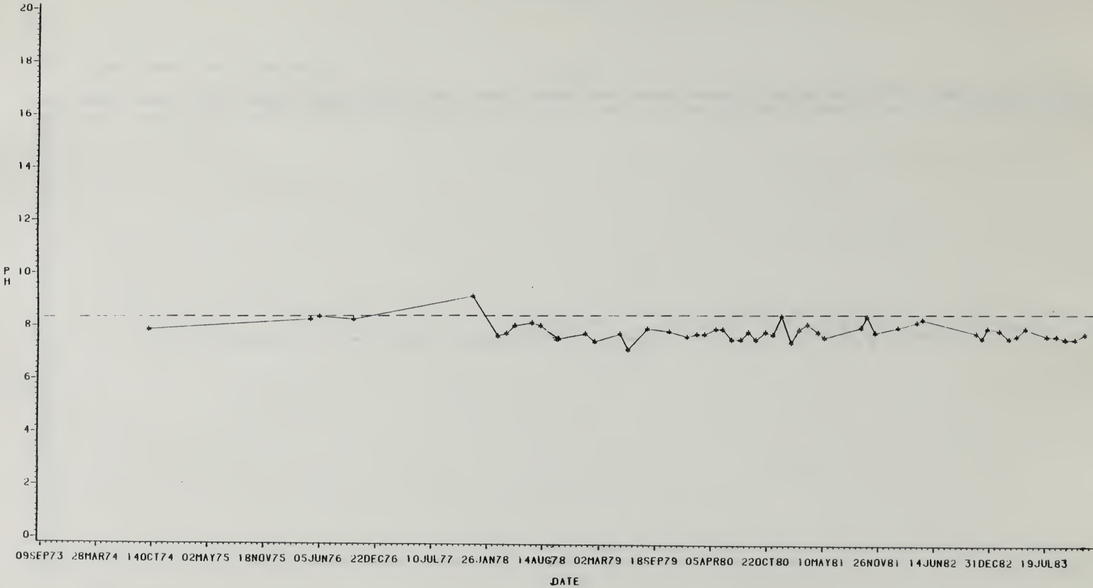
TIME SERIES PLOT OF TEMPERATURE FOR SPRINGS AND SEEPS
LOC=WS13



TIME SERIES PLOT OF TEMPERATURE FOR SPRINGS AND SEEPS
LOC=WS36

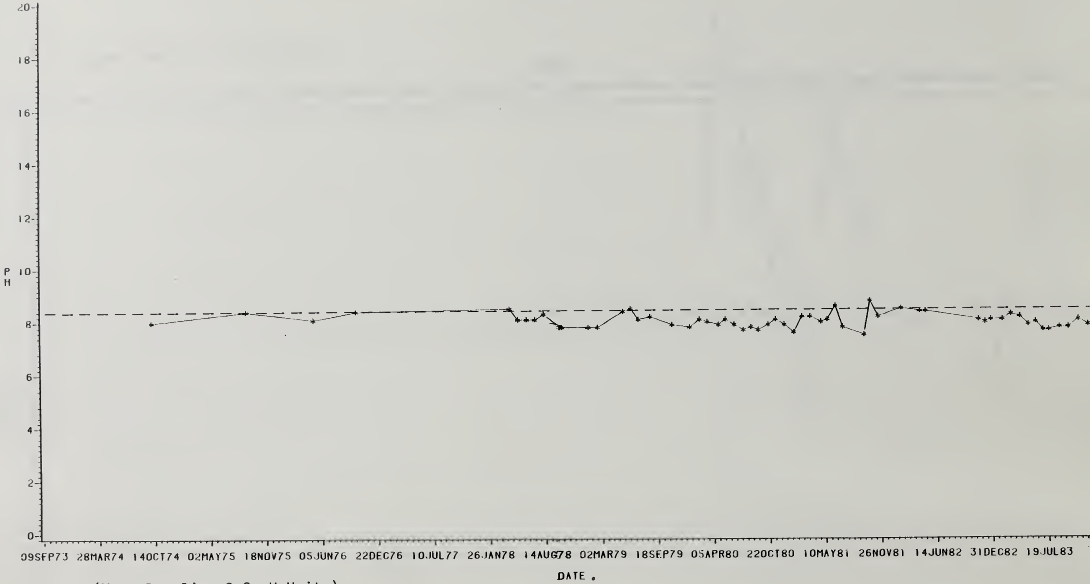


TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS
LOC=WS01



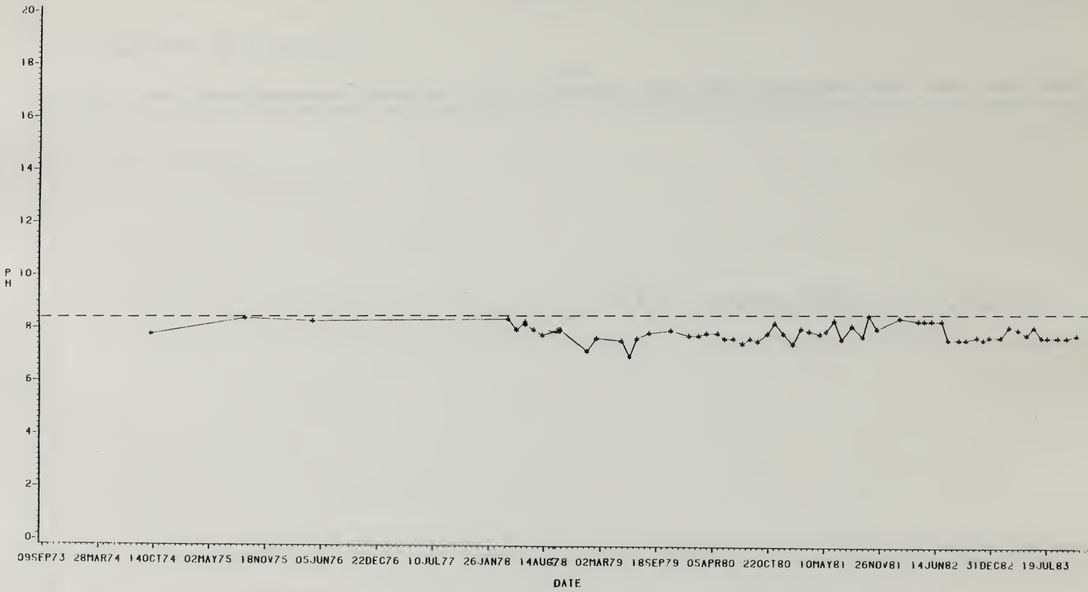
_ _ _ (Mean Baseline 8.2 pH Units)

TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS
LOC=WS02



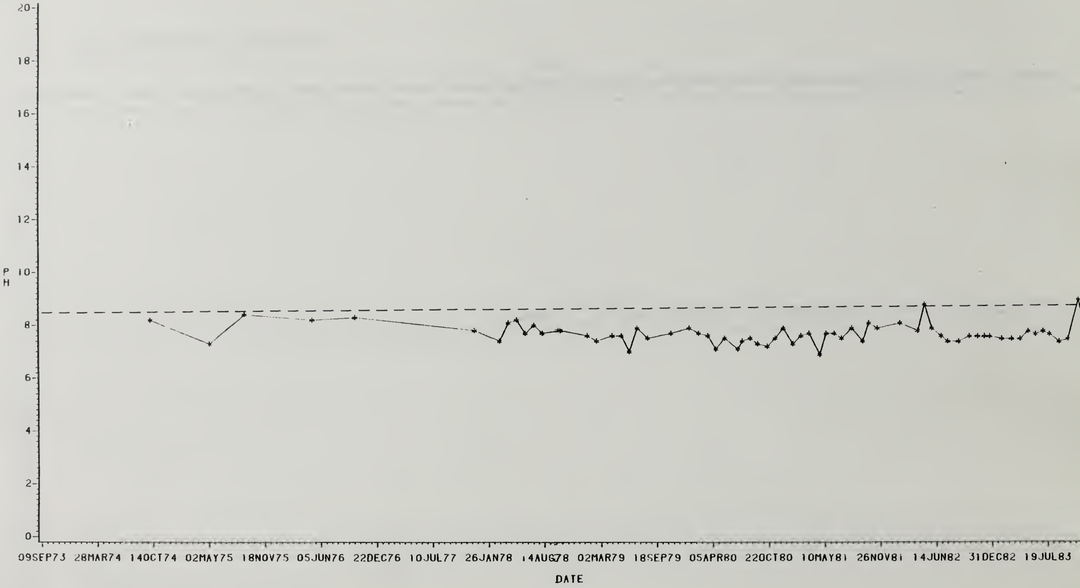
_ _ _ (Mean Baseline 8.2 pH Units)

# TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS
LOC=WS04



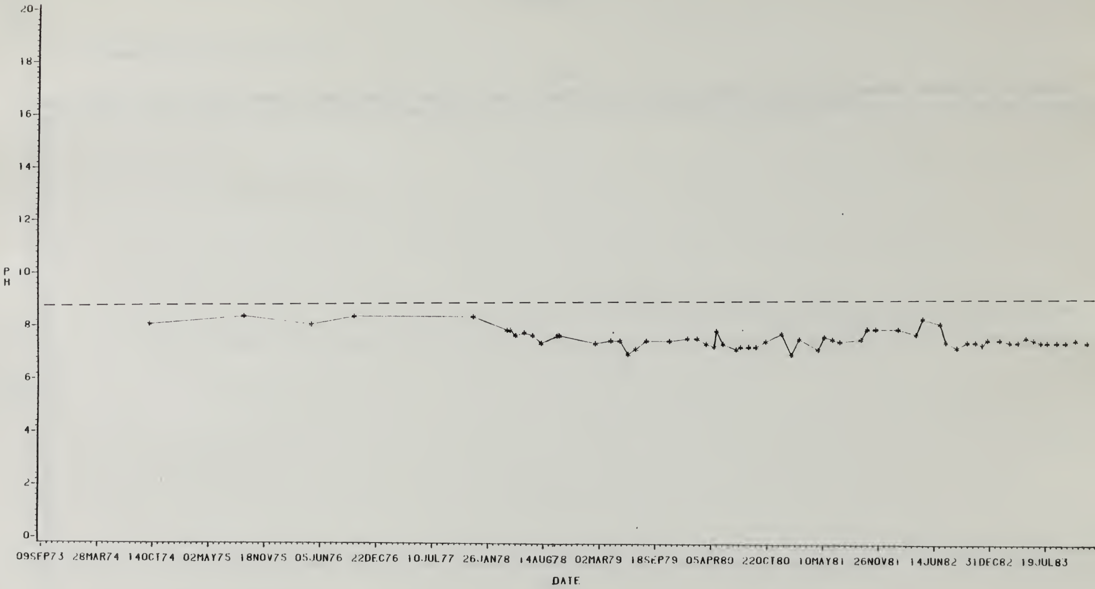
_ _ _ (Mean Baseline 8.2 pH Units)

TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS
LOC-WS06



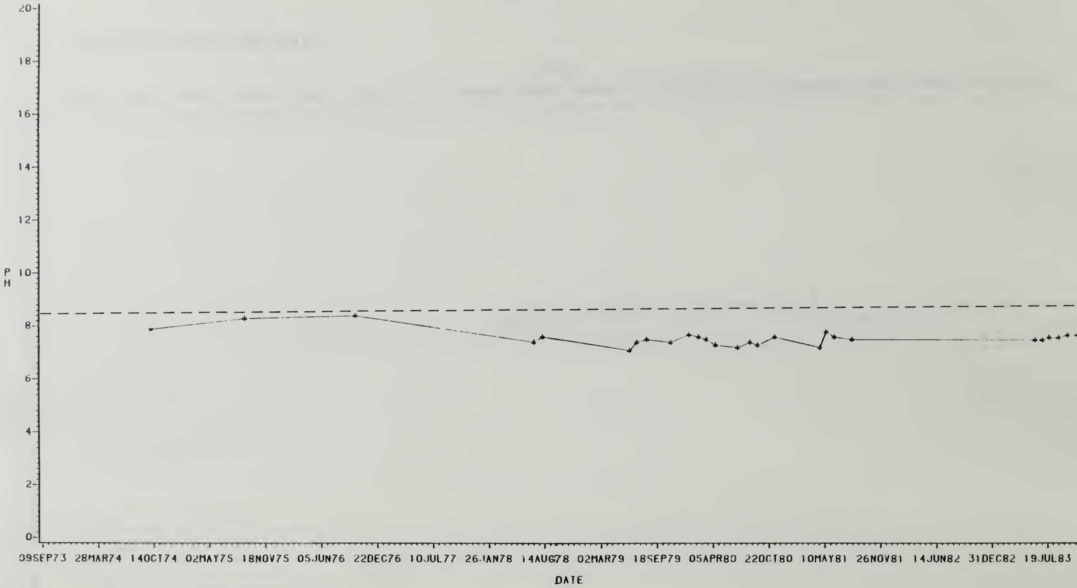
_ _ _ (Mean Baseline 8.1 pH Units)

TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS
LOC=WS07



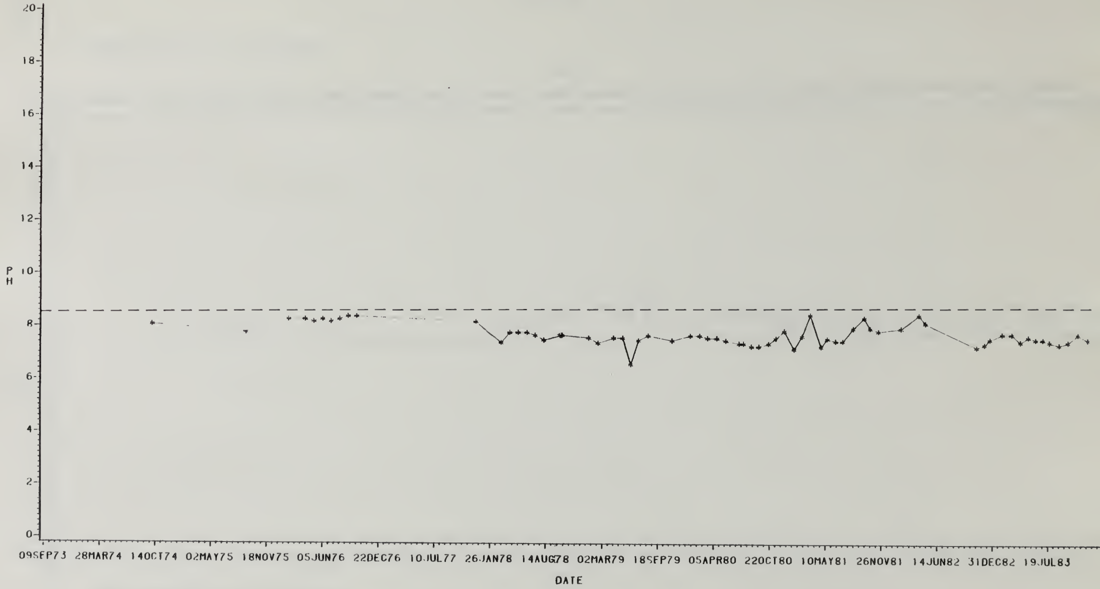
_ _ _ (Mean Baseline 8.3 pH Units)

TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS
LOC=WS08



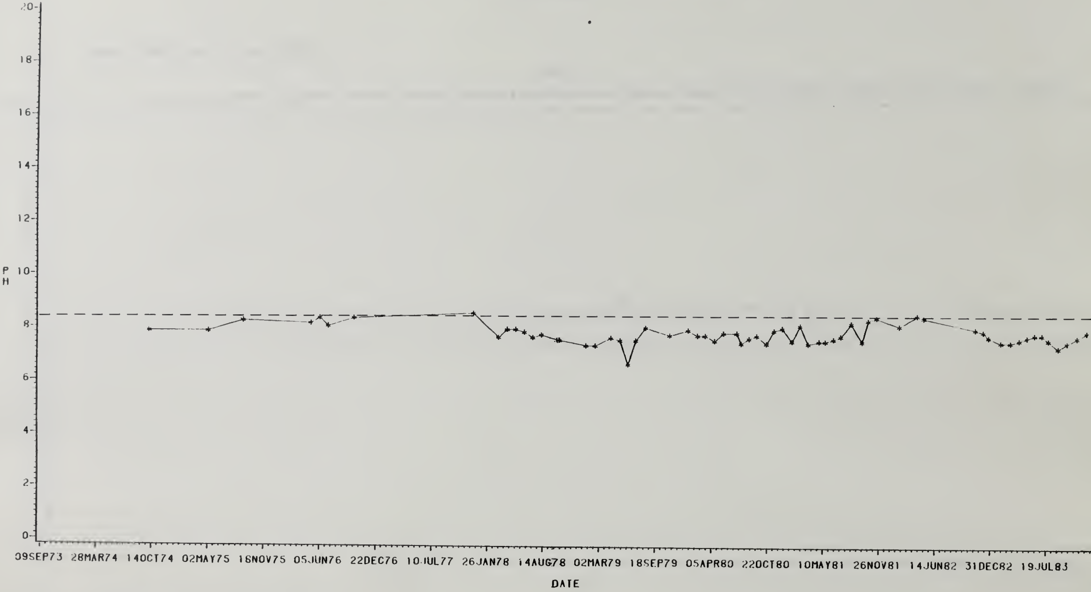
_ _ _ (Mean Baseline 8.2 pH Units)

TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS
LOC=WS09



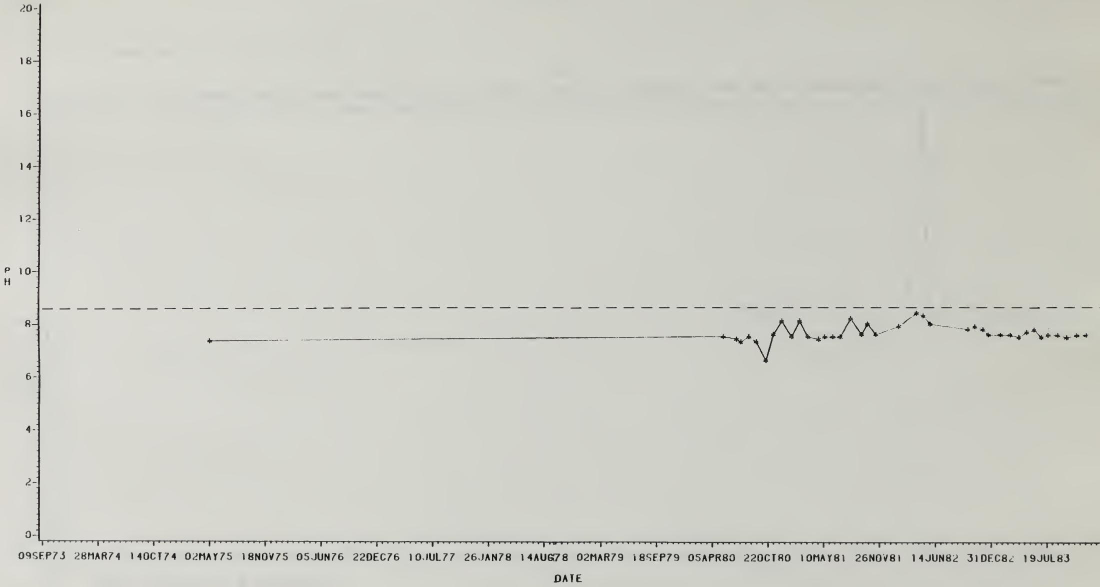
_ _ _ (Mean Baseline 8.2 pH Units)

TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS
LOC=WS10



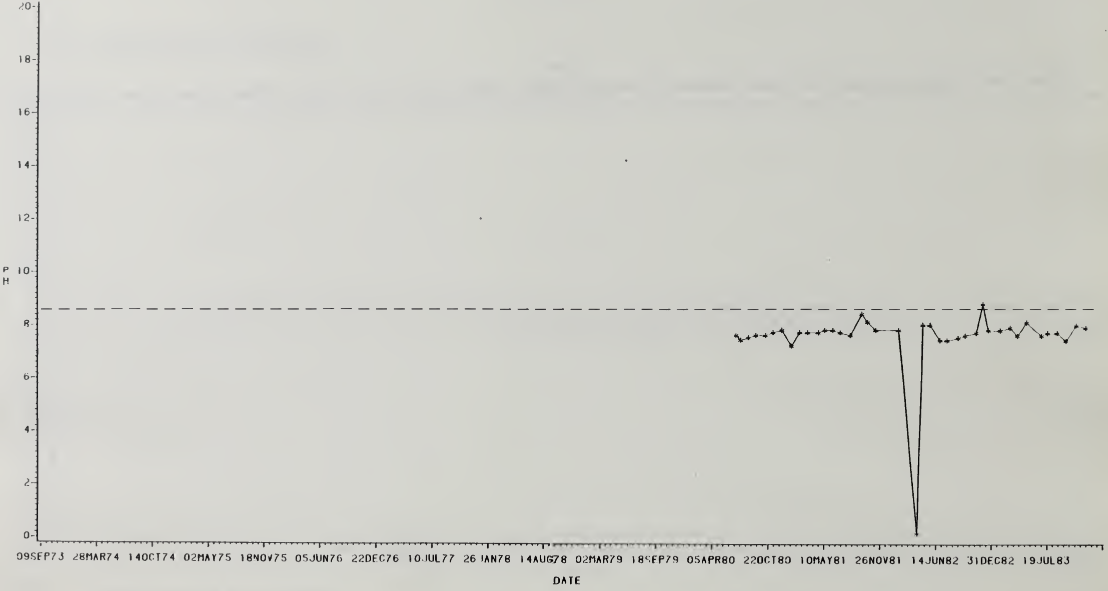
_ _ (Mean Baseline 8.2 pH Units)

TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS
LOC=WS11



_ _ _ (Mean Baseline 8.2 pH Units)

TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS
LOC=WS12



_ _ _ (Mean Baseline 8.2 pH Units)

TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS
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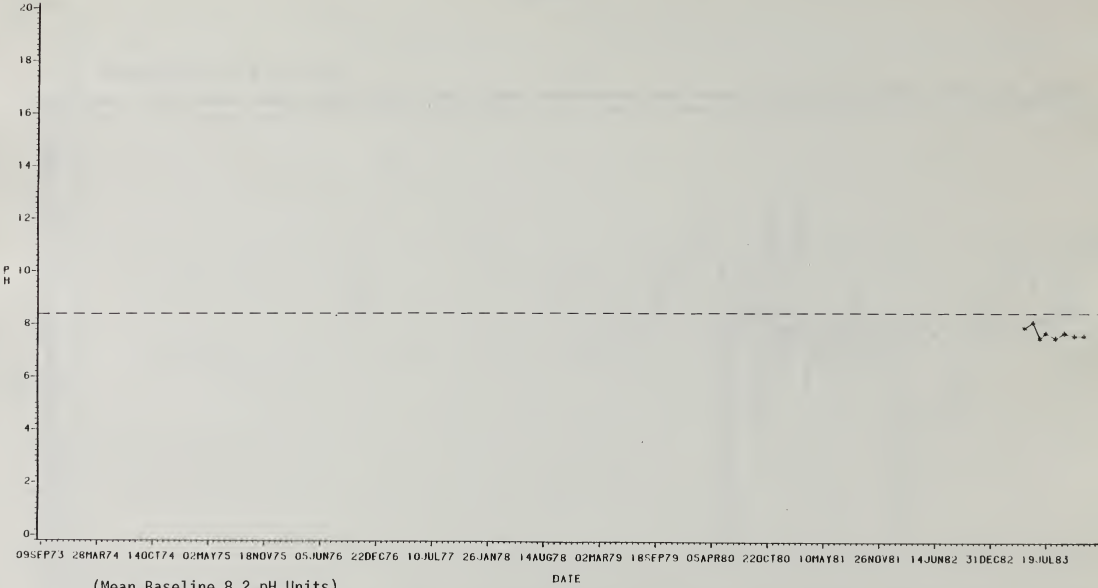
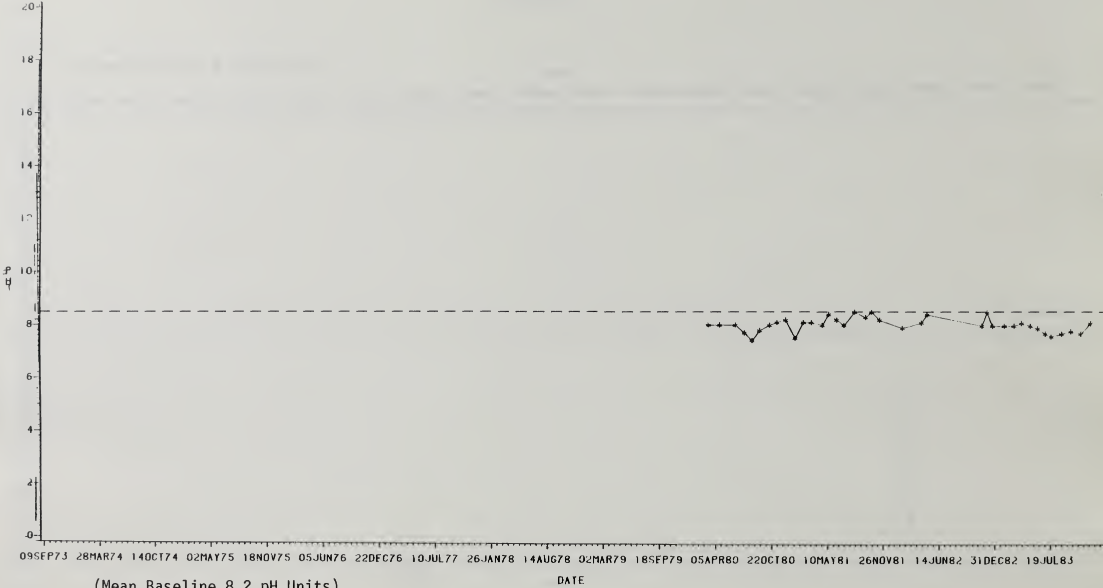


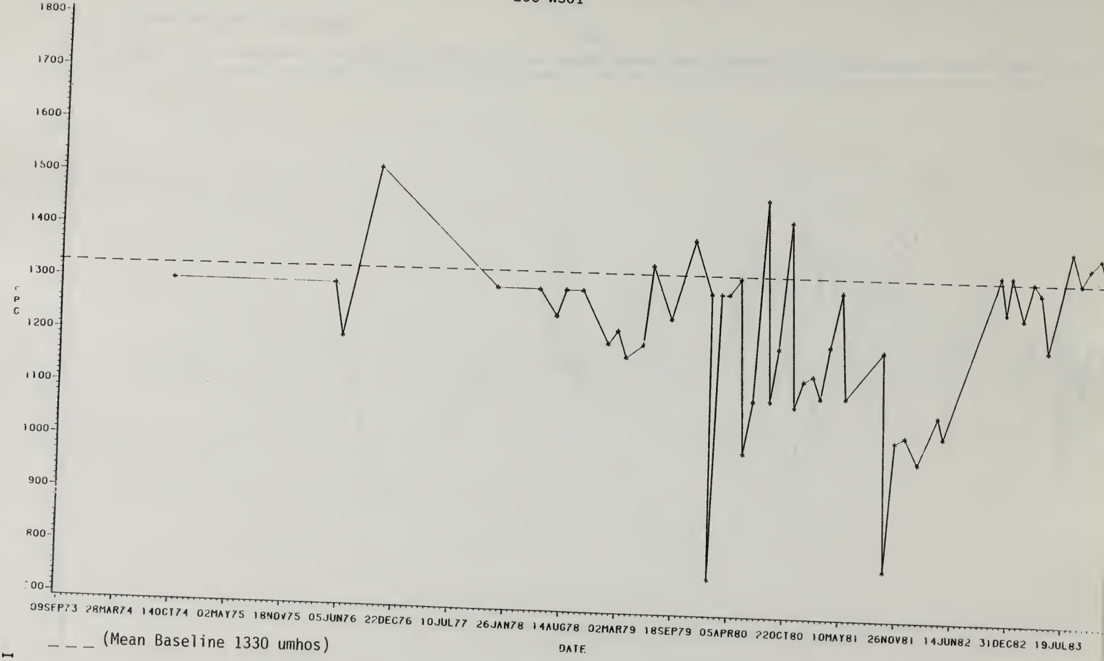
_ _ _ (Mean Baseline 8.2 pH Units)

TIME SERIES PLOT OF PH FOR SPRINGS AND SEEPS
LOC=WS36

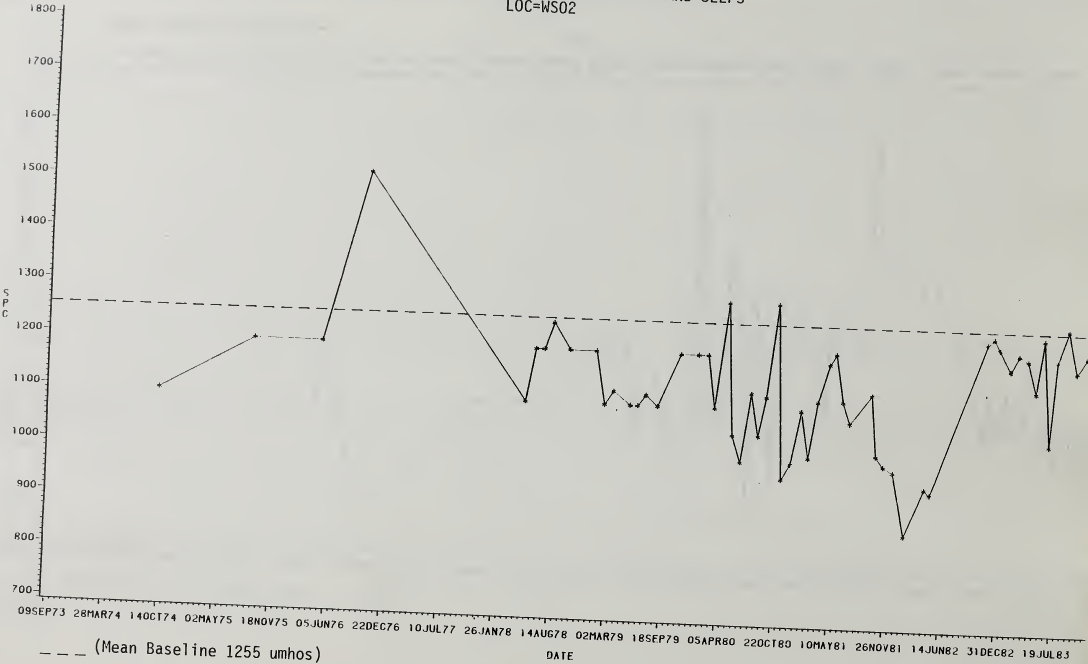


_ _ _ (Mean Baseline 8.2 pH Units)

TIME SERIES PLOT OF SPC FOR SPRINGS AND SEEPS
LOC-WS01

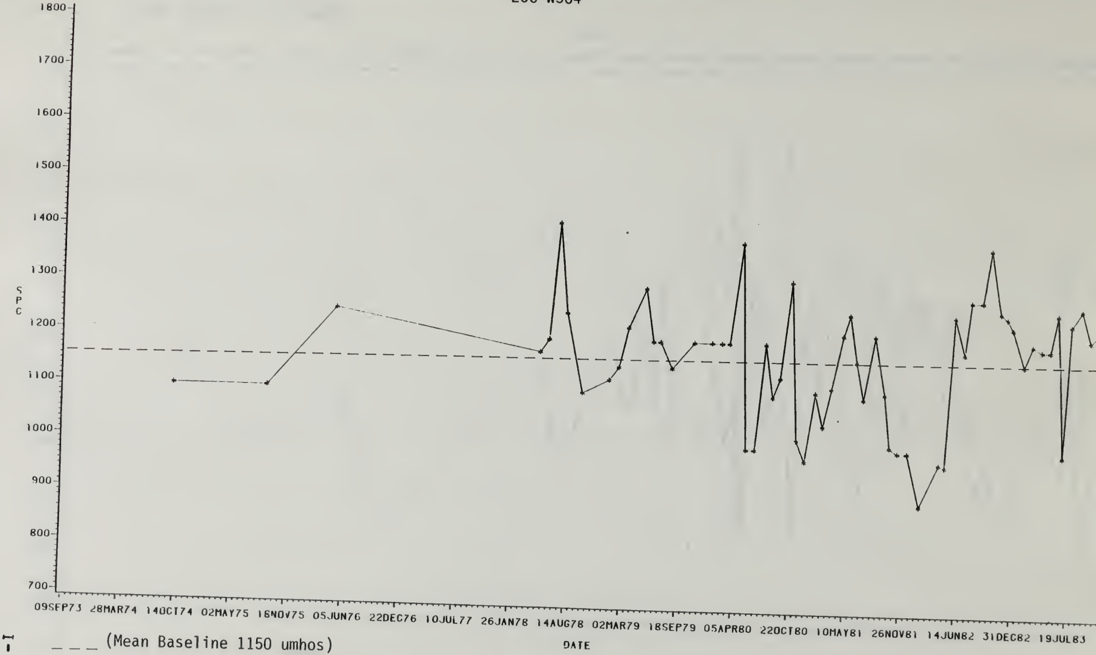


TIME SERIES PLOT OF SPC FOR SPRINGS AND SEEPS
LOC=WS02



– – – (Mean Baseline 1255 umhos)

# TIME SERIES PLOT OF SPC FOR SPRINGS AND SEEPS
LOC=WS04



TIME SERIES PLOT OF SPC FOR SPRINGS AND SEEPS
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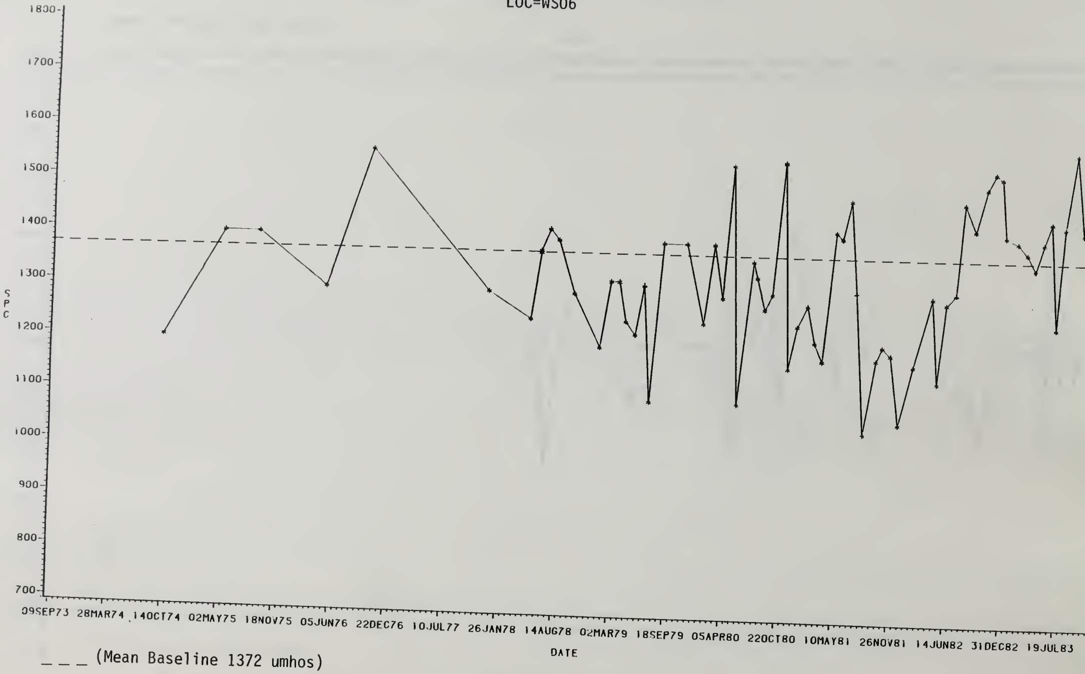

TIME SERIES PLOT OF SPC FOR SPRINGS AND SEEPS
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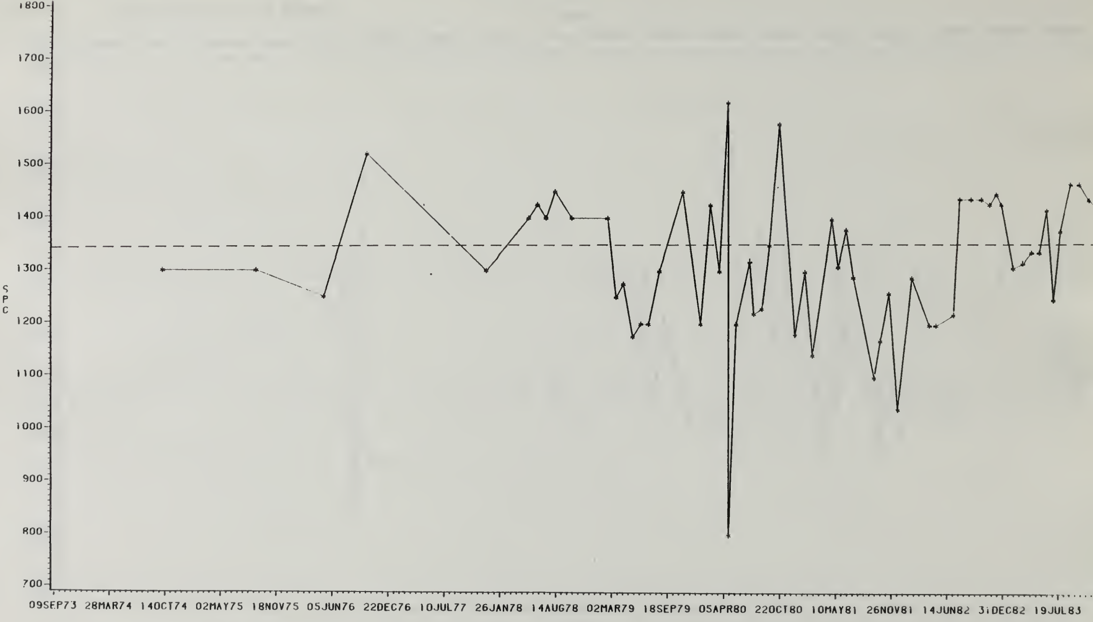
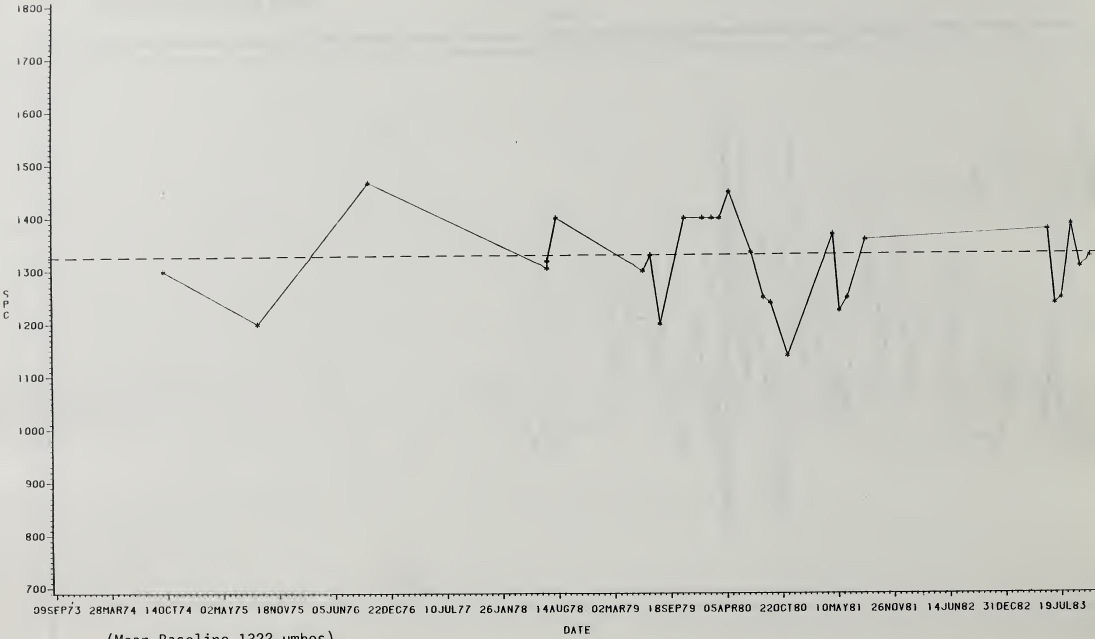


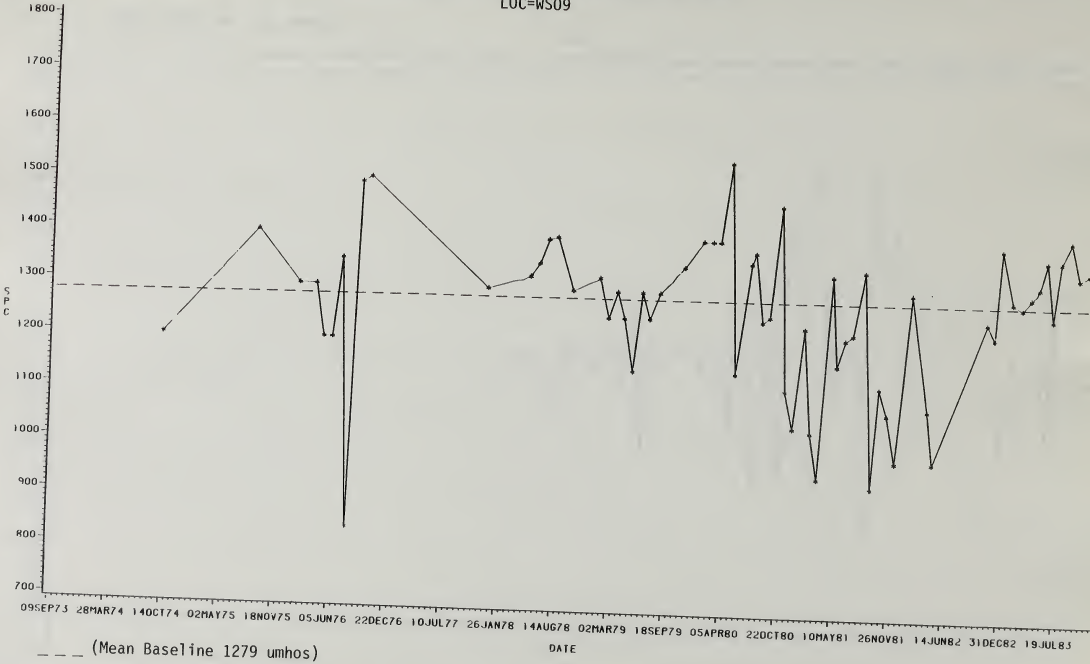
_ _ _ (Mean Baseline 1342 umhos)

TIME SERIES PLOT OF SPC FOR SPRINGS AND SEEPS
LOC=WS08

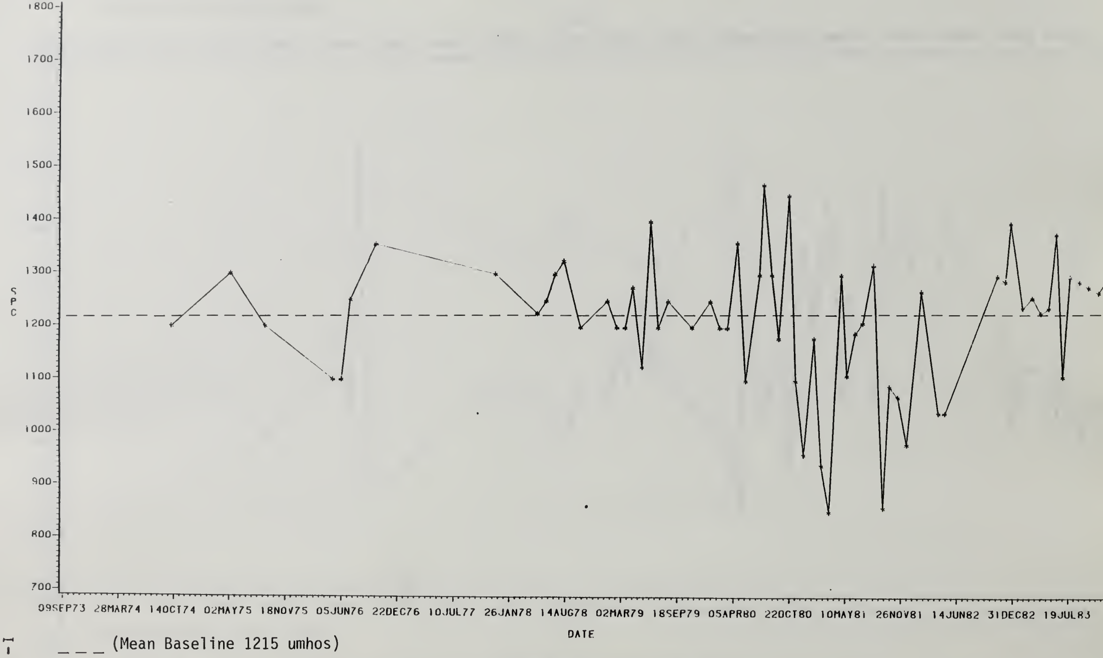


_ _ _ (Mean Baseline 1322 umhos)

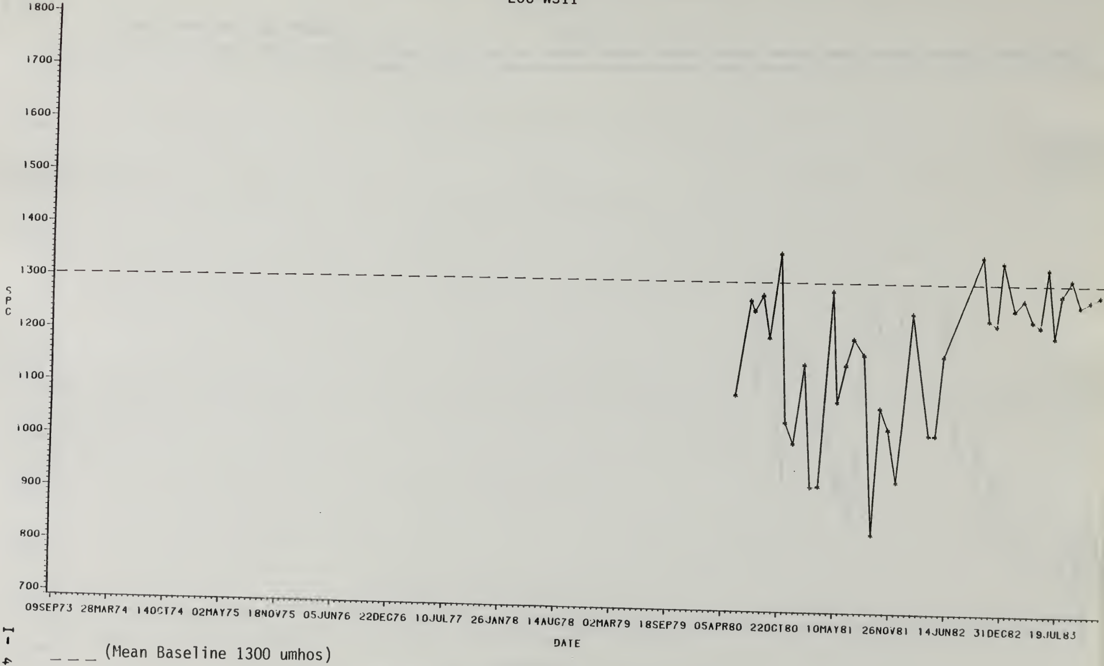
TIME SERIES PLOT OF SPC FOR SPRINGS AND SEEPS
LOC=WS09



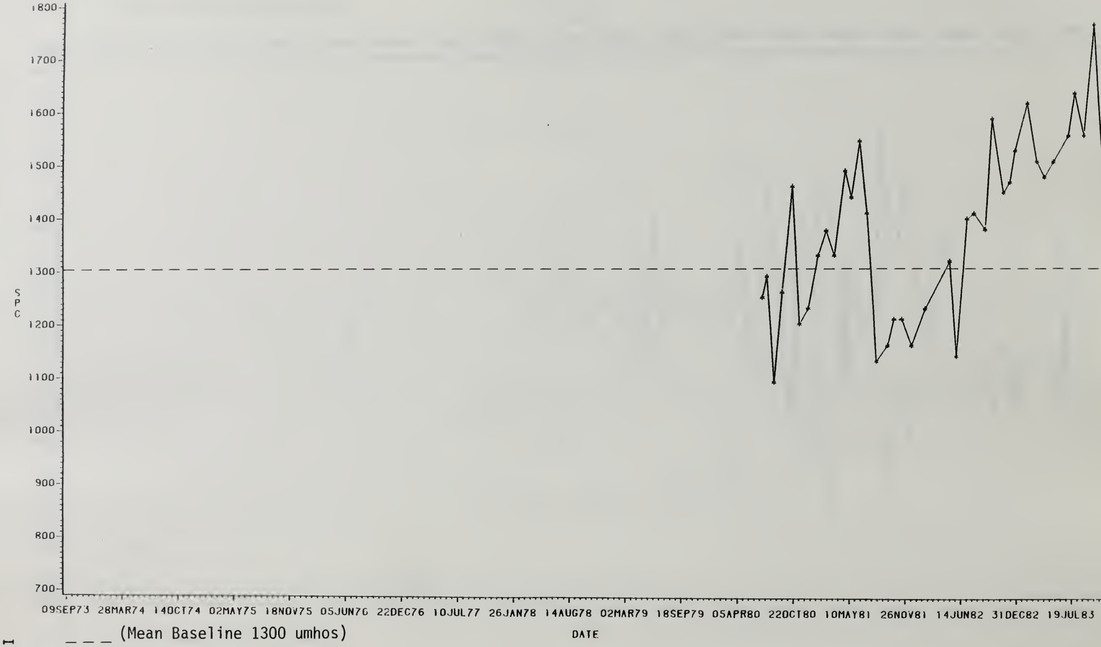
TIME SERIES PLOT OF SPC FOR SPRINGS AND SEEPS
LOC-WS10



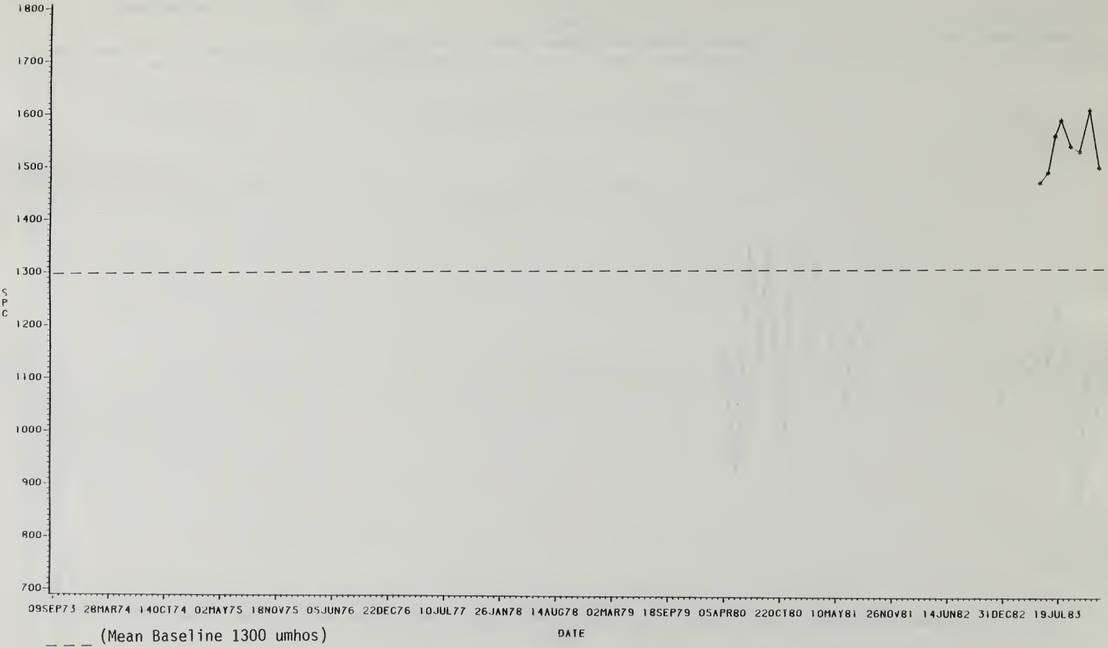
TIME SERIES PLOT OF SPC FOR SPRINGS AND SEEPS
LOC=WS11



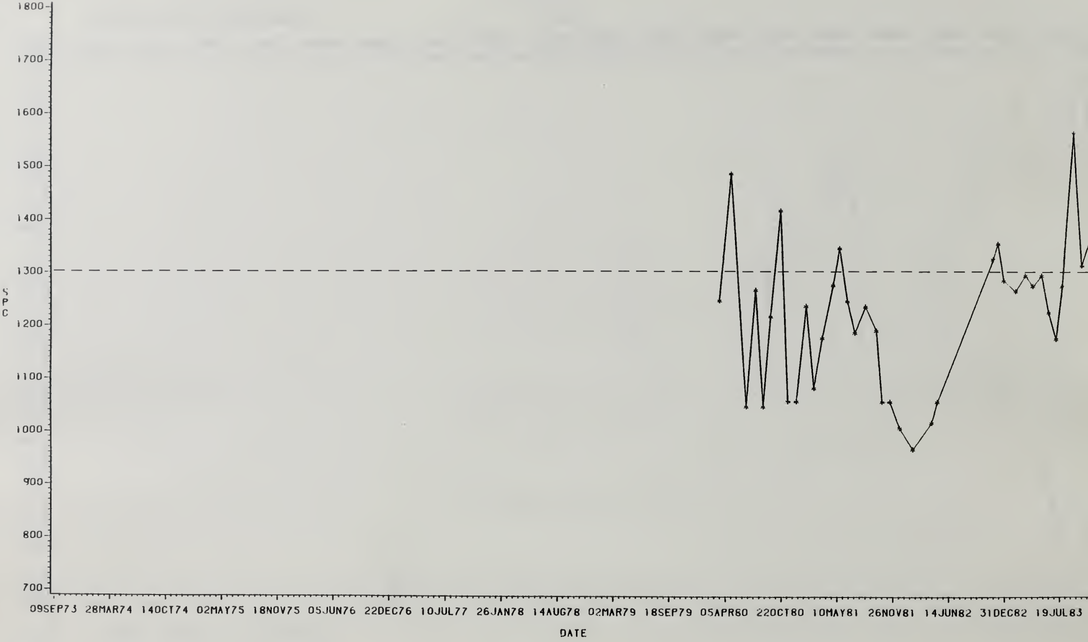
TIME SERIES PLOT OF SPC FOR SPRINGS AND SEEPS
LOC=WS12



TIME SERIES PLOT OF SPC FOR SPRINGS AND SEEPS
LOC-WS13

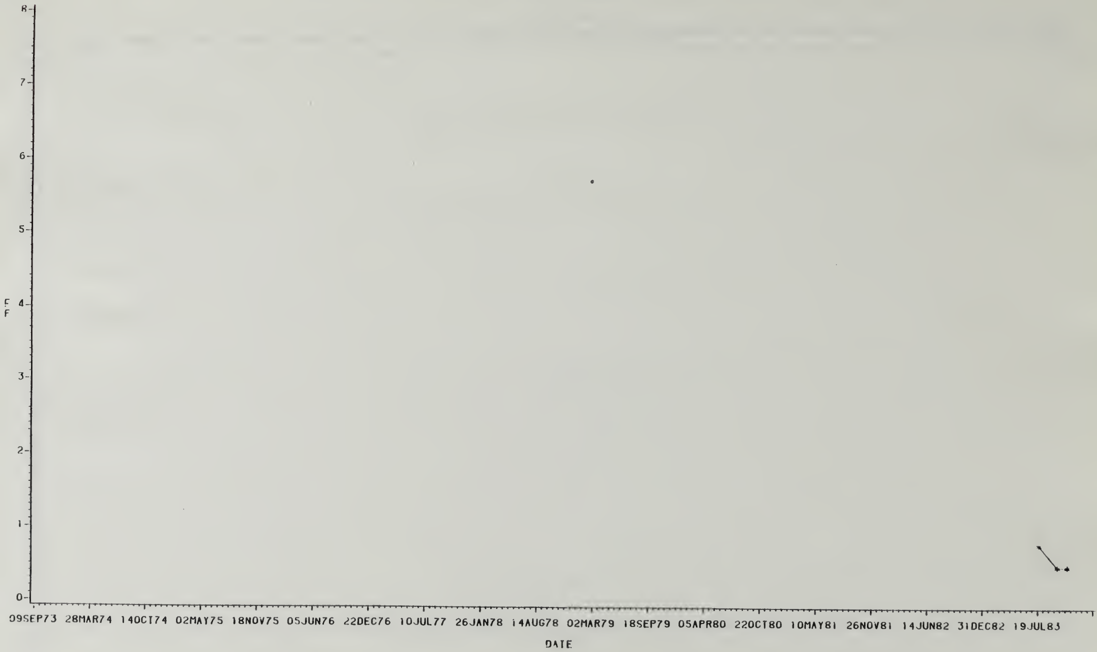


TIME SERIES PLOT OF SPC FOR SPRINGS AND SEEPS
LOC=WS36

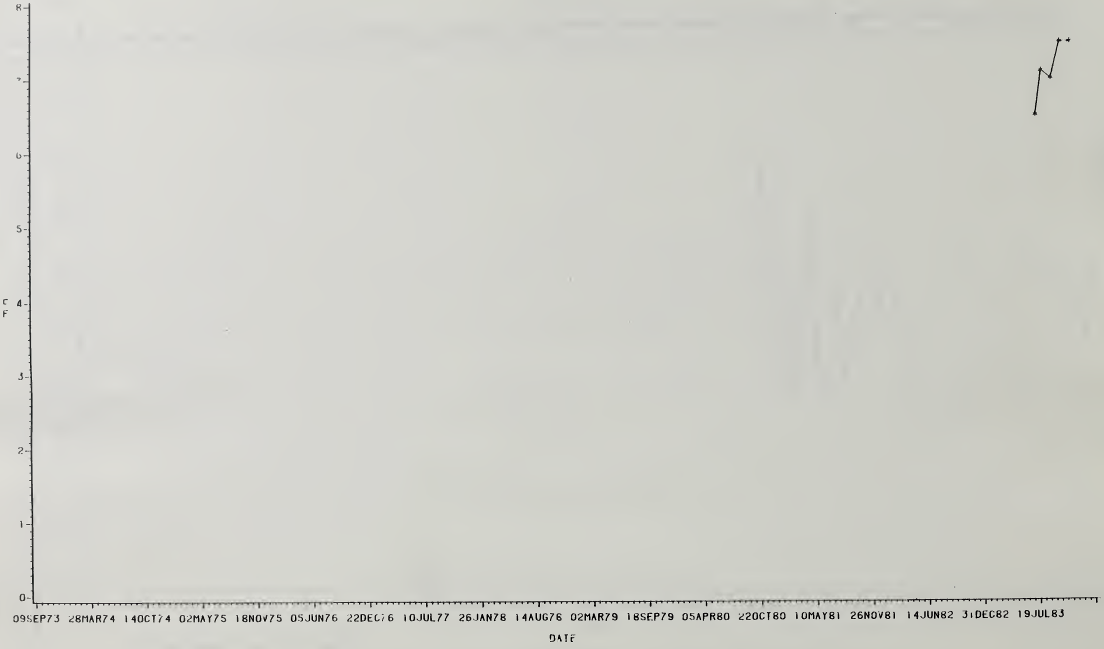


_ _ _ (Mean Baseline 1300 umhos)

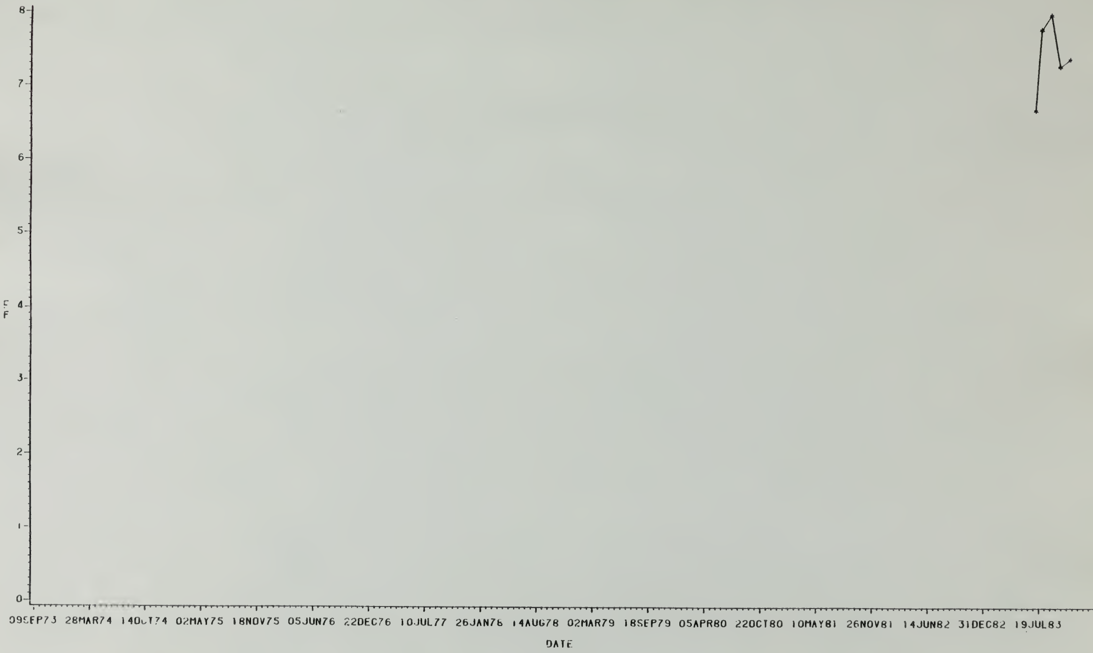
# TIME SERIES PLOT OF FIELD FLUORIDE FOR SPRINGS AND SEEPS
LOC = WS07



TIME SERIES PLOT OF FIELD FLUORIDE FOR SPRINGS AND SEEPS
LOC = WS07



TIME SERIES OF FIELD FLUORIDE FOR SPRINGS AND SEEPS
LOC = WS07



1.2.2.3 Alluvial Wells

There were no samples taken during this report period (June through November 1983).

During this report period water samples of pH and conductivity remained between the 20% range for these baseline values. If a sample should have to be taken, parameters were to be analyzed as followed by the DMP quarterly schedule, Table 1.2.2.3-1

TABLE 1.2.2.3-1

Parameters Analyzed During IMP - Alluvials

Ag	Mn	Zn	Oil and Grease
As	Pb	Na	Kjeldahl N
Ba	Mo	K	COD
Cd	Cl	Ca	Phenols
Cr	Li	Mg	TDS
Cu	Al	Fluoride	SO_4
Fe	Sr	B	CO_3
Hg	Se	Ni	HCO_3
Alkalinity	Hardness	Ammonia	No

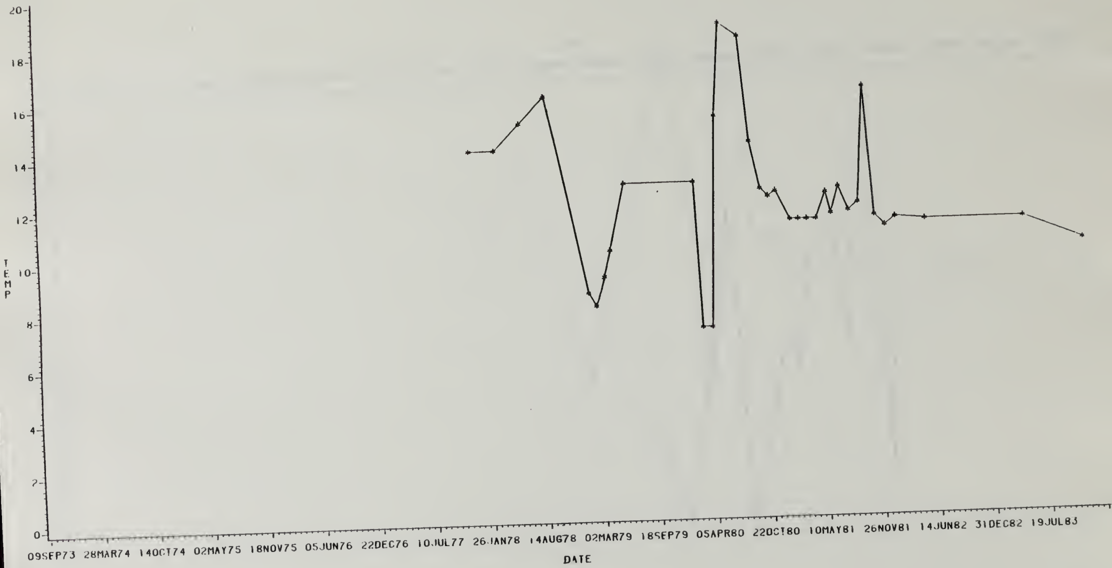
Time series plots of temperature, pH and specific conductance are presented in this section of alluvial wells sampled since baseline, see Table 1.2.2.3-2.

TABLE 1.2.2.3-2

Station	Code	Temperature	pH	Specific Conductance
A-1	WA01	I-493	I-506	I-519
A-2	WA02	I-494	I-507	I-520
A-3	WA03	I-495	I-508	I-521
A-5	WA05	I-496	I-509	I-522
A-6	WA06	I-497	I-510	I-523
A-7	WA07	I-498	I-511	I-524
A-8	WA08	I-499	I-512	I-525
A-9	WA09	I-500	I-513	I-526
A-10	WA10	I-501	I-514	I-527
A-11	WA11	I-502	I-515	I-528
A-12	WA12	I-503	I-516	I-529
A-5A	WA55	I-504	I-517	I-530
A-5B	WA56	I-505	I-518	I-531

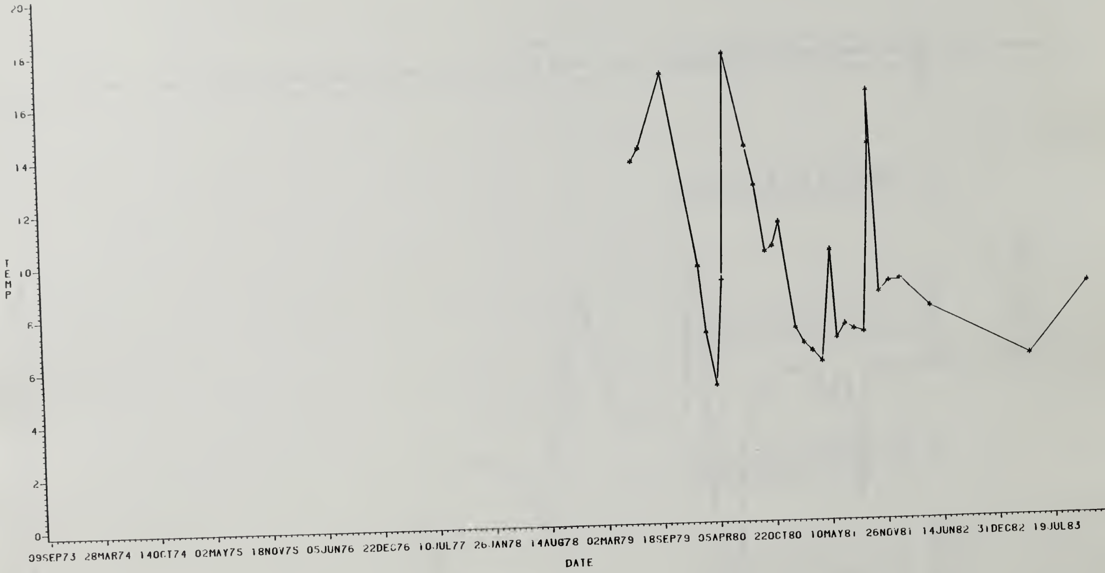
FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS

LOC=WA01



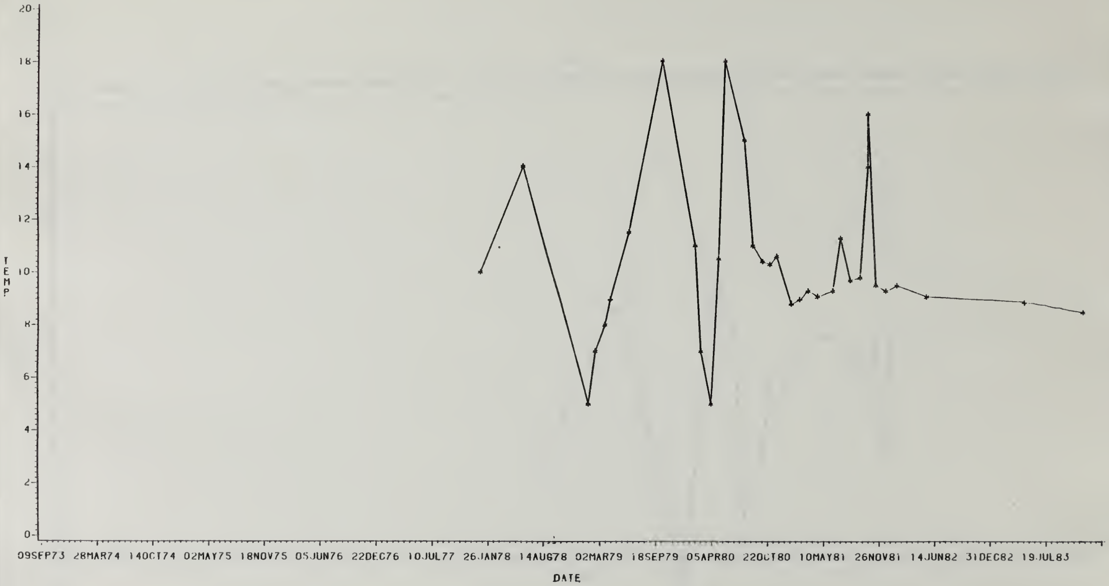
FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS

LOG=WA02



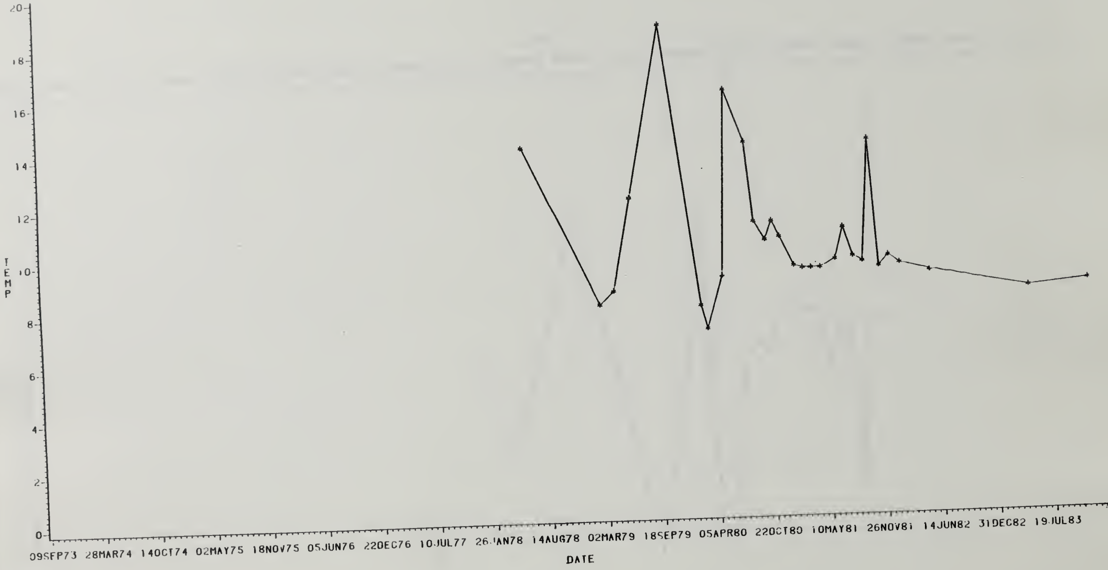
FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS

LOC=WA03



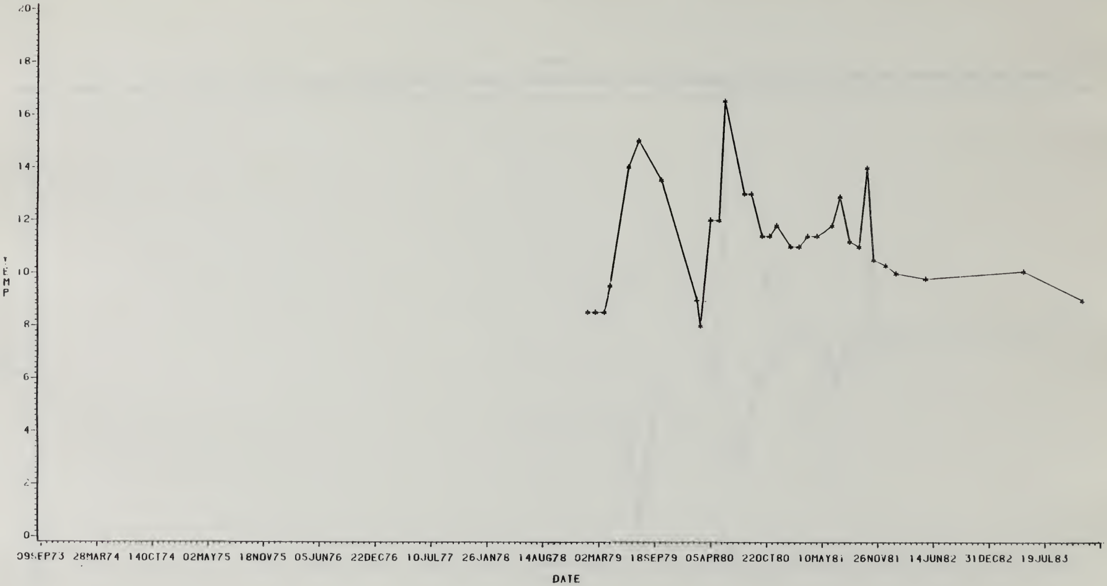
FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS

LOC=WA05



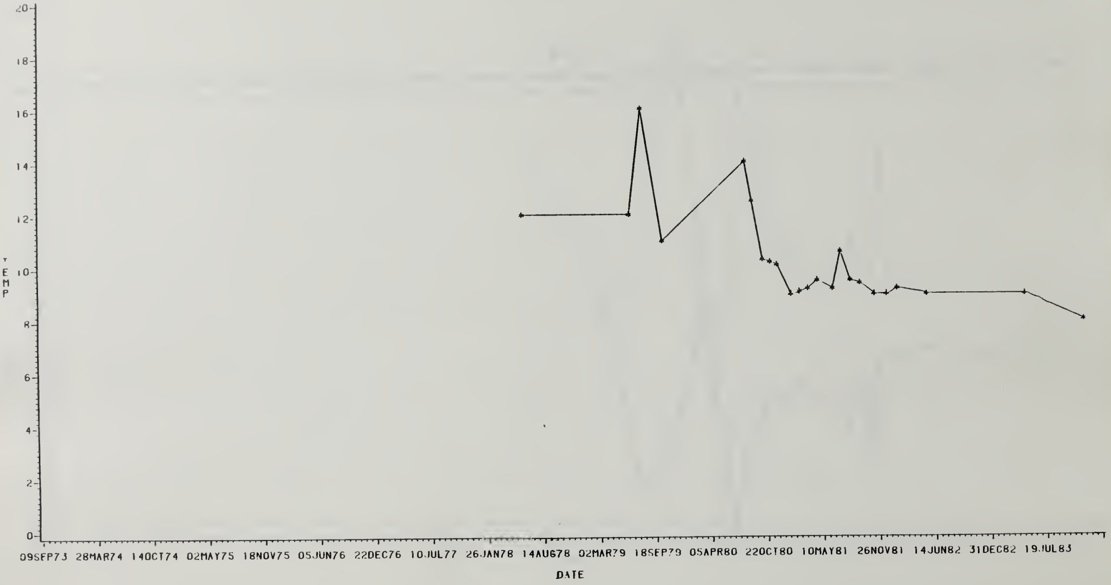
FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS

LOC=WA06

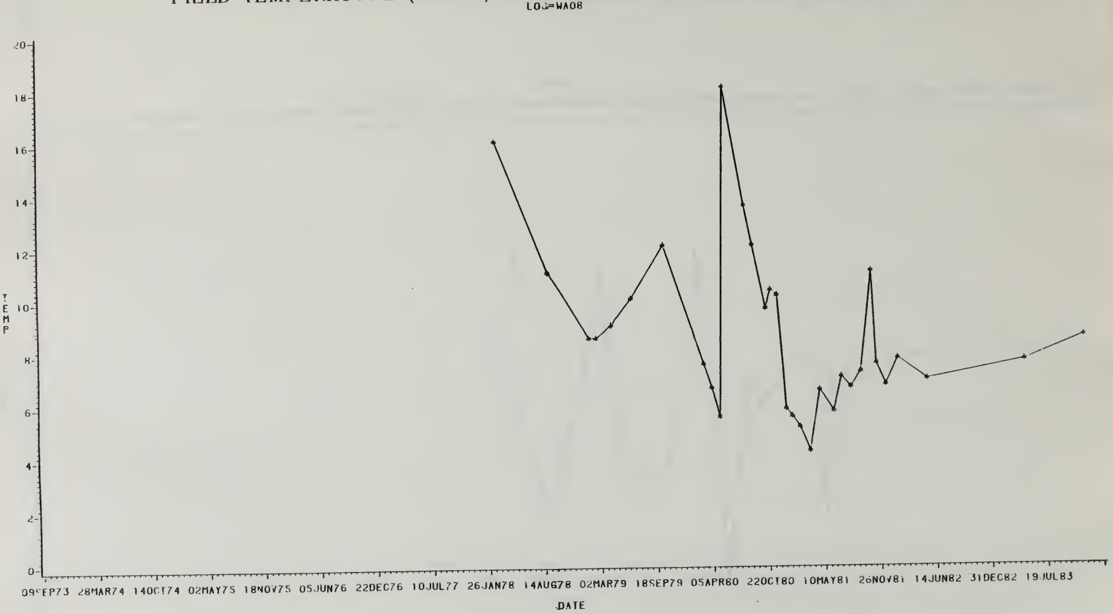


FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS

LOC=WA07

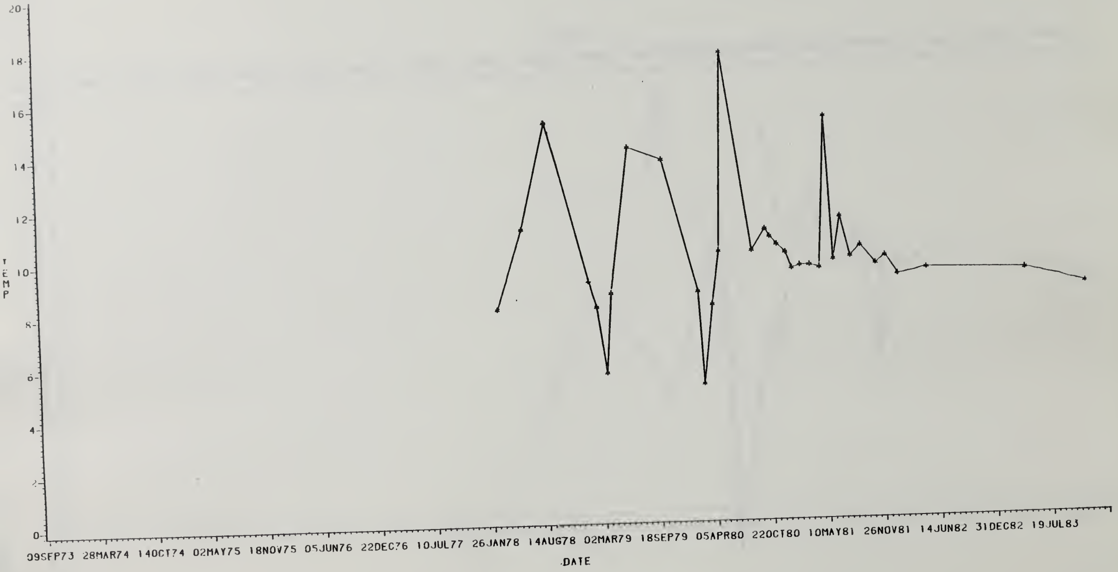


FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS



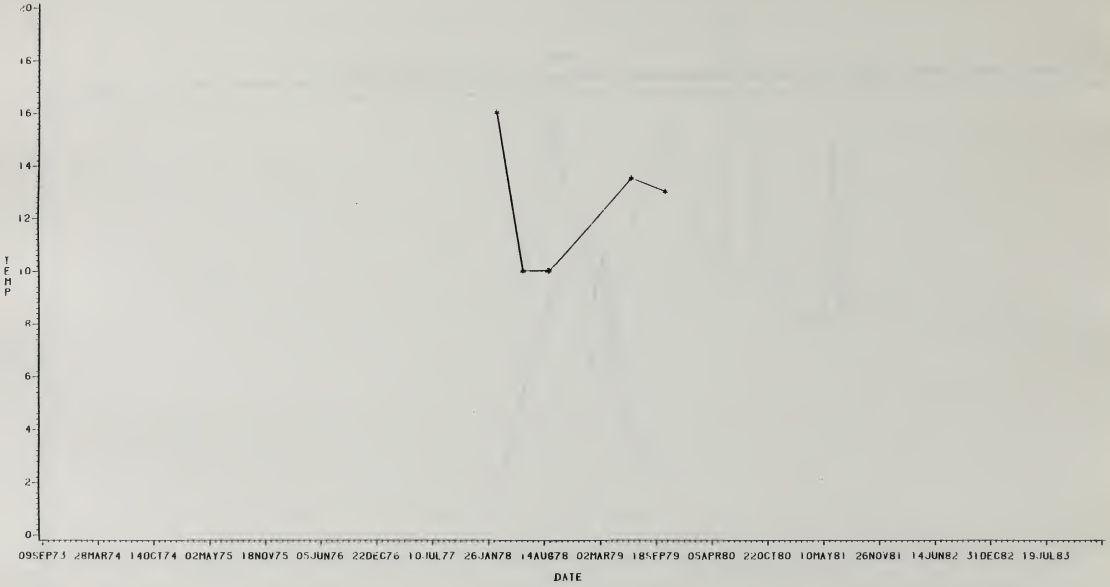
FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS

LOC=WA09

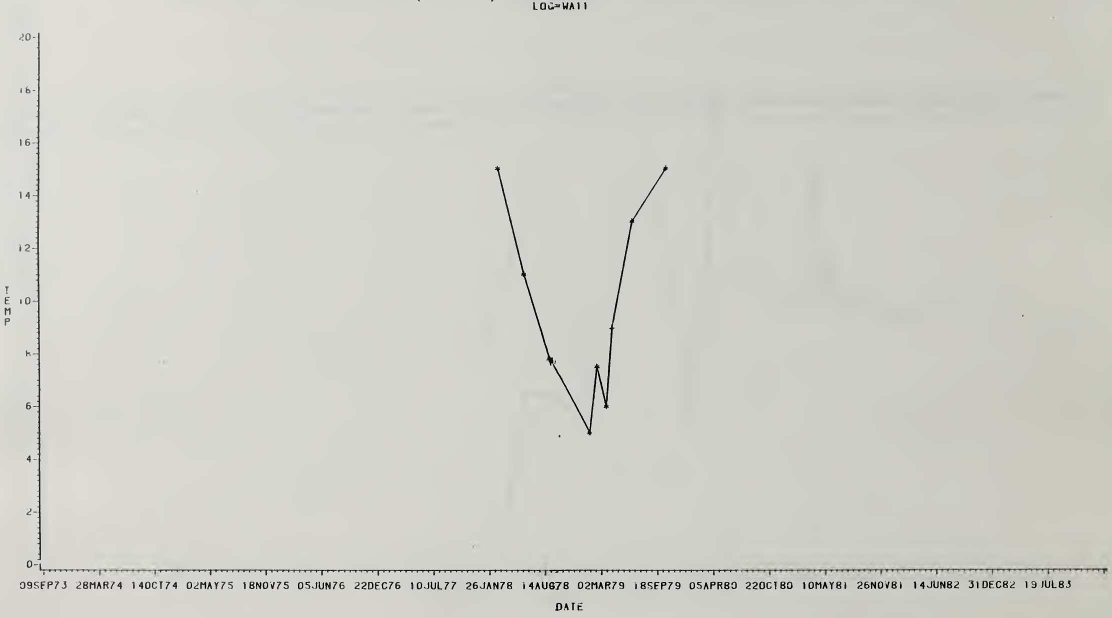


FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS

LOG=WA10

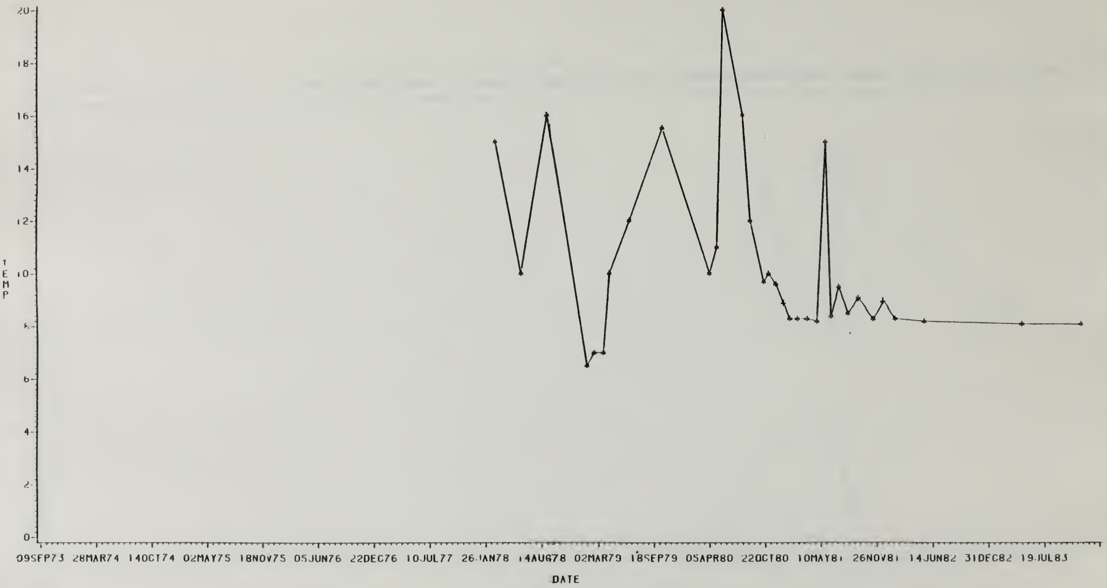


FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS

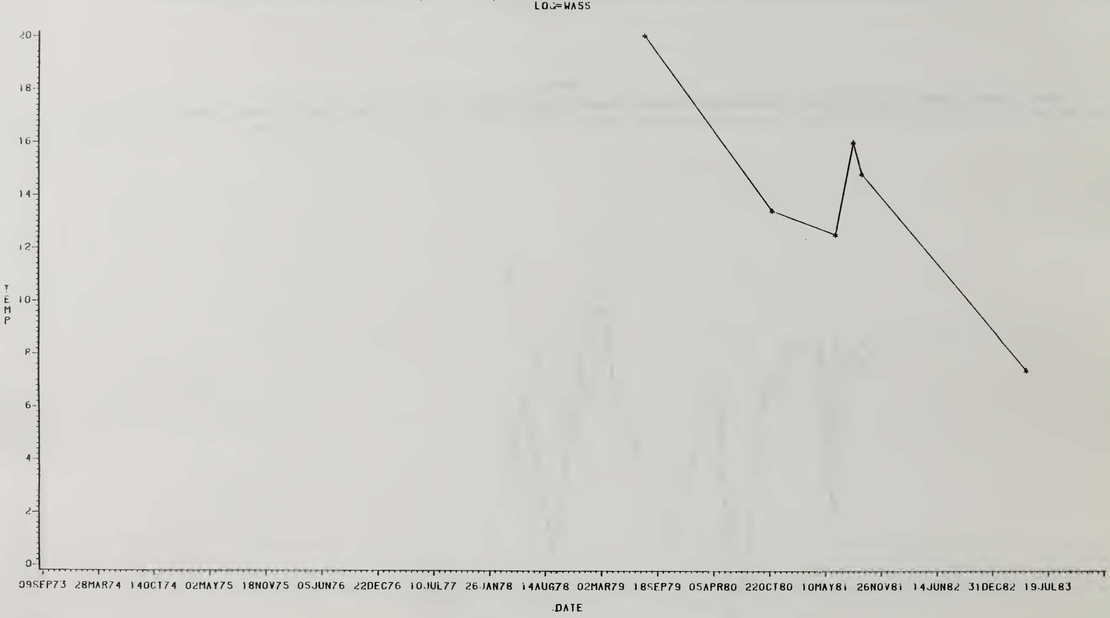


FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS

LOC=WA12

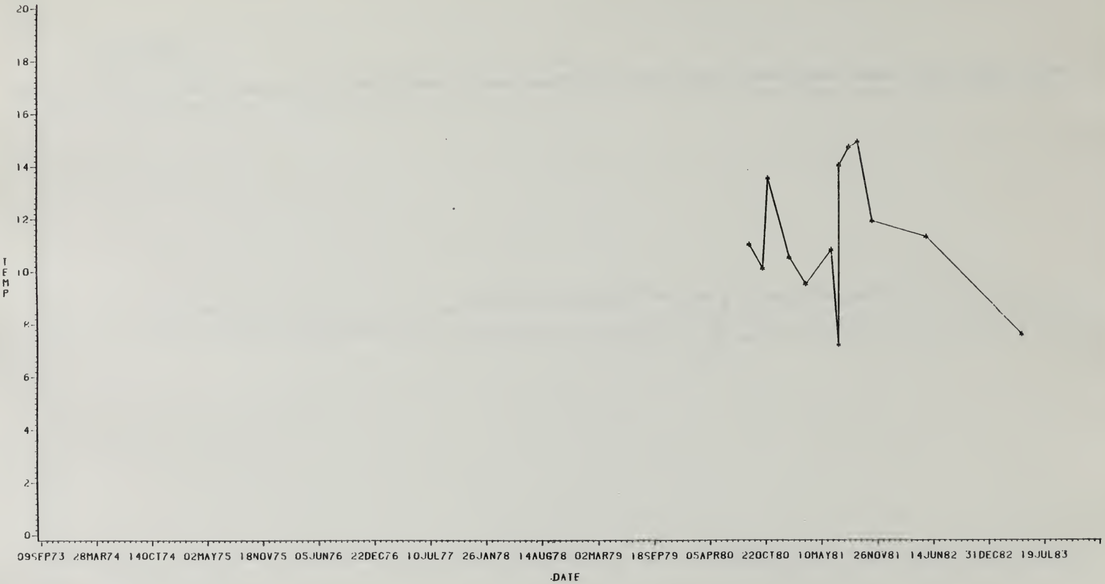


FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS



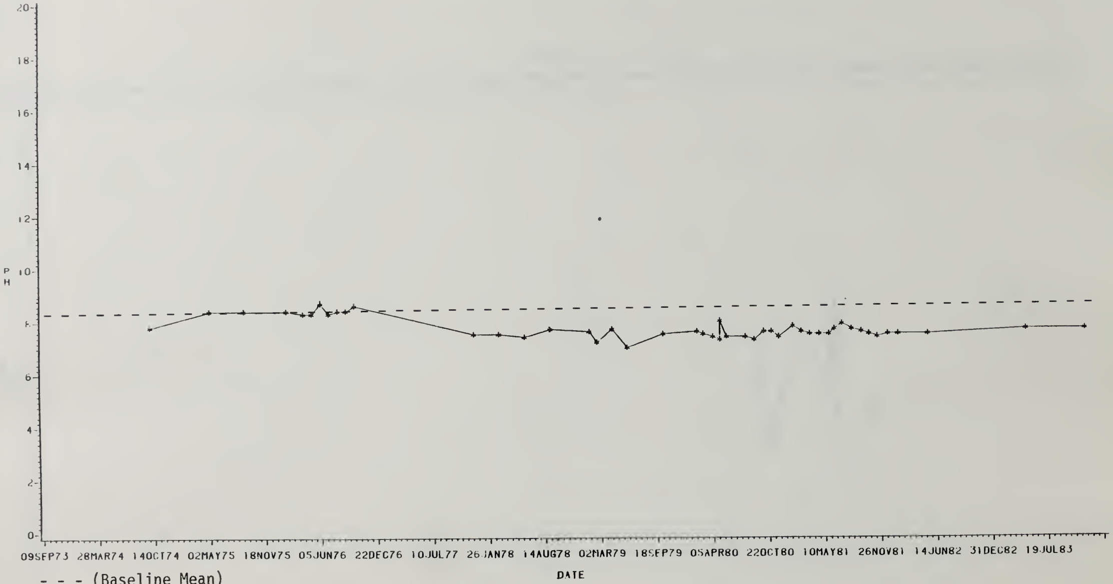
FIELD TEMPERATURE (DEG C) TIME SERIES OF ALLUVIAL WELL WATERS

LOG=WA56



FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS

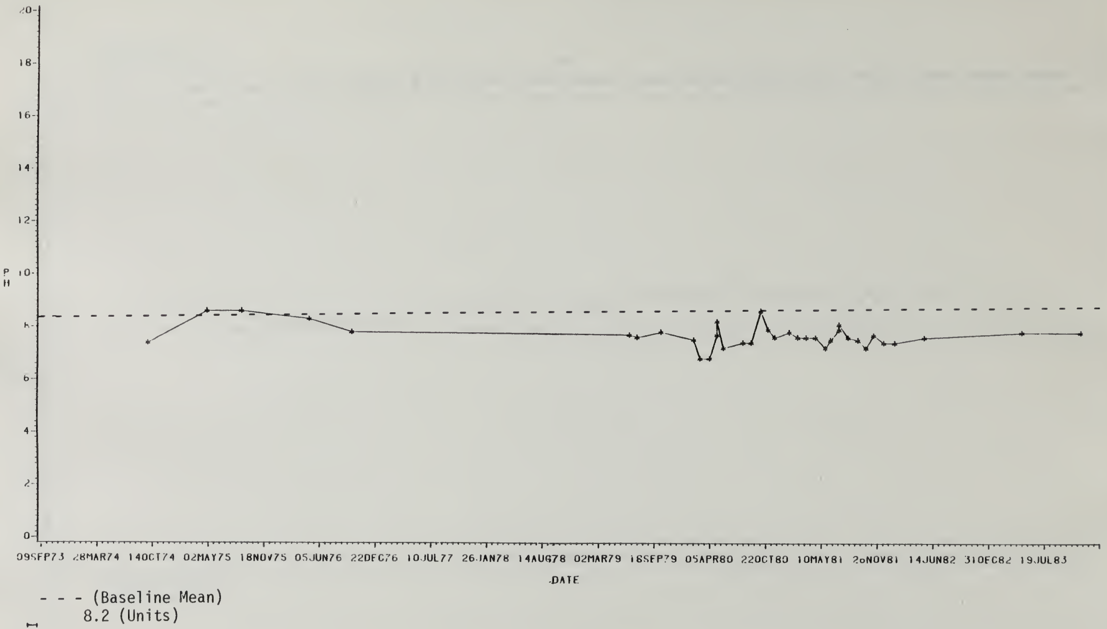
LOC=WA01



- - - (Baseline Mean)
8.2 (units)

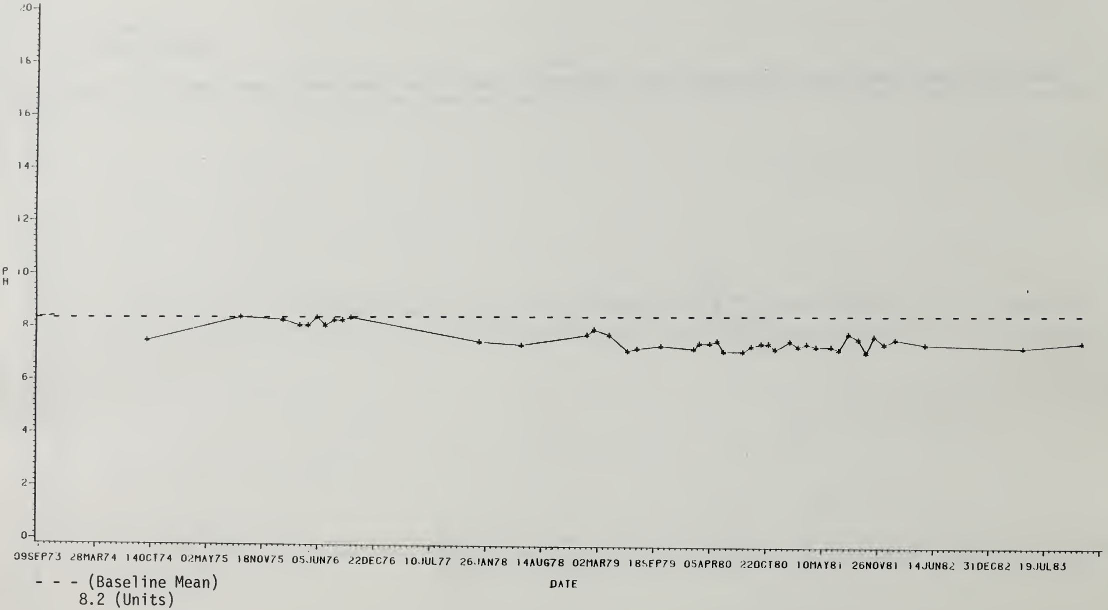
FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS

LOC=WA02



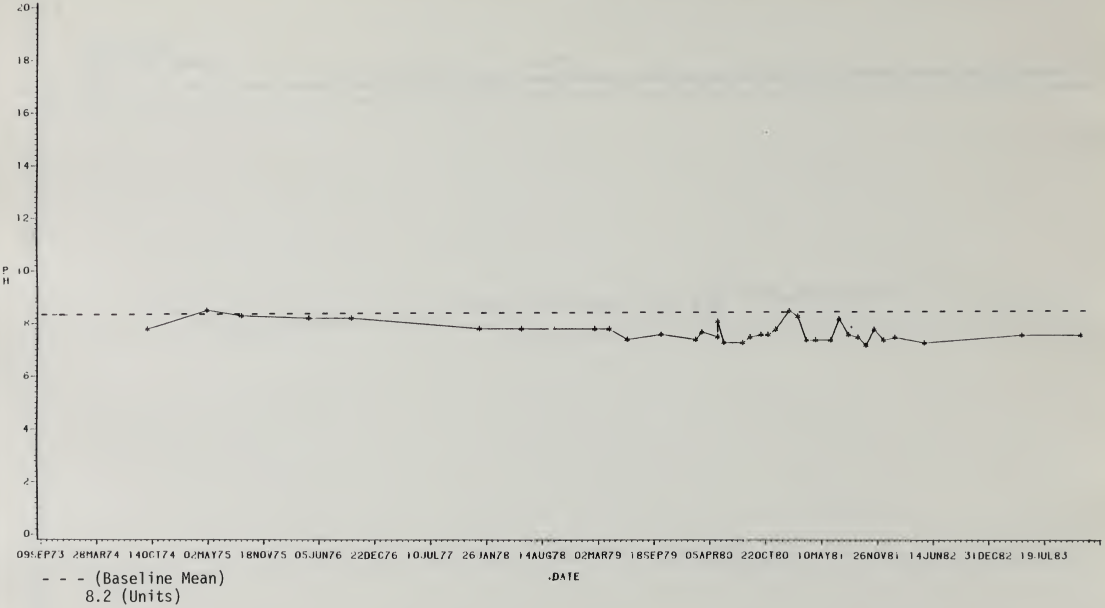
FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS

LOC=WA03



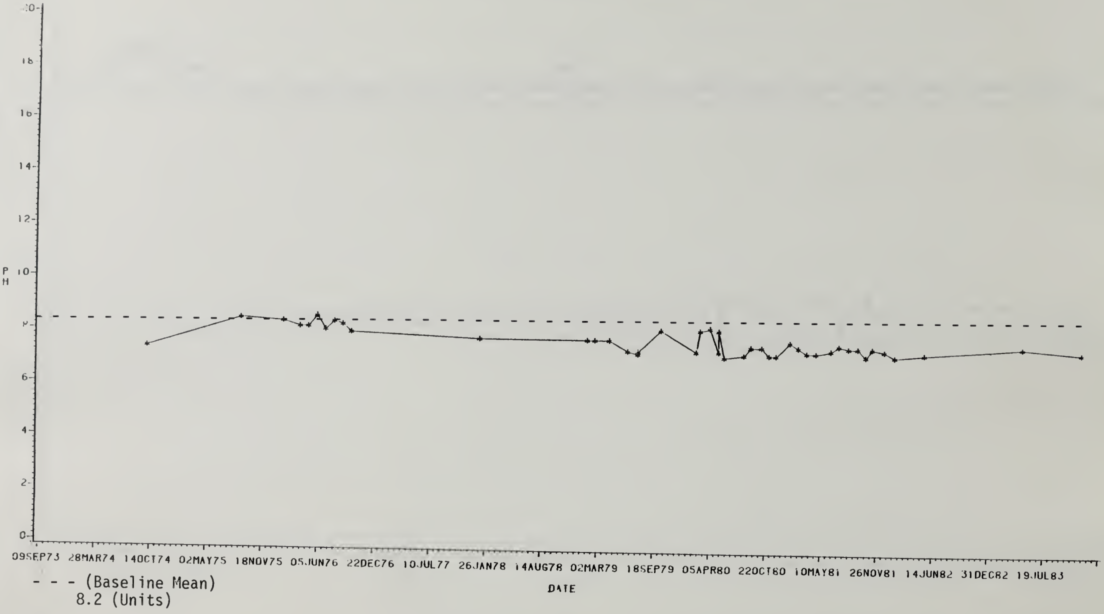
FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS

LOC=WA05

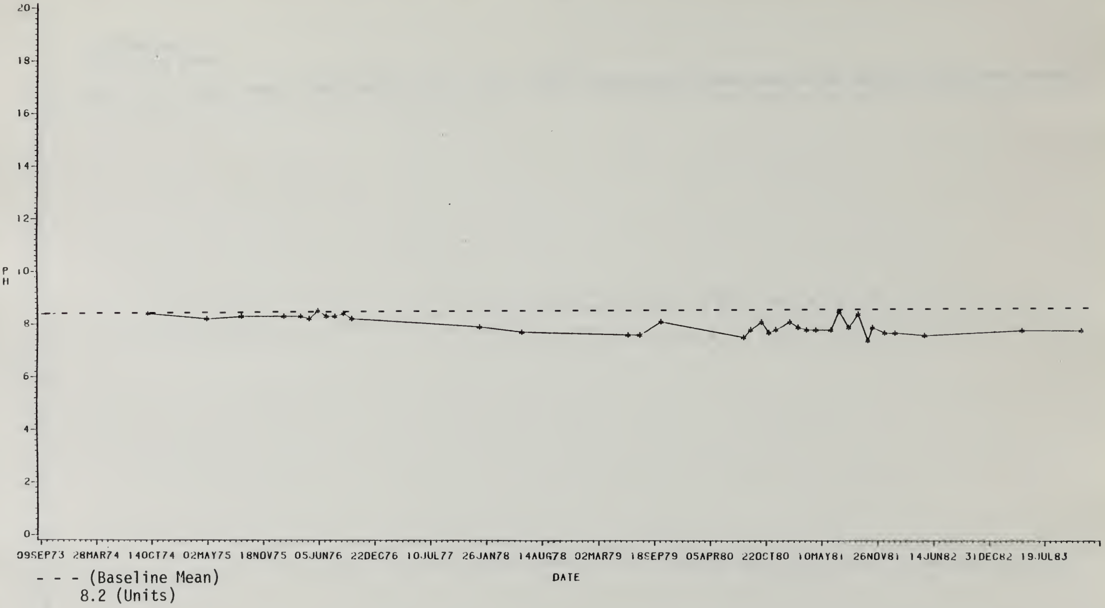


FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS

LOC=WA06

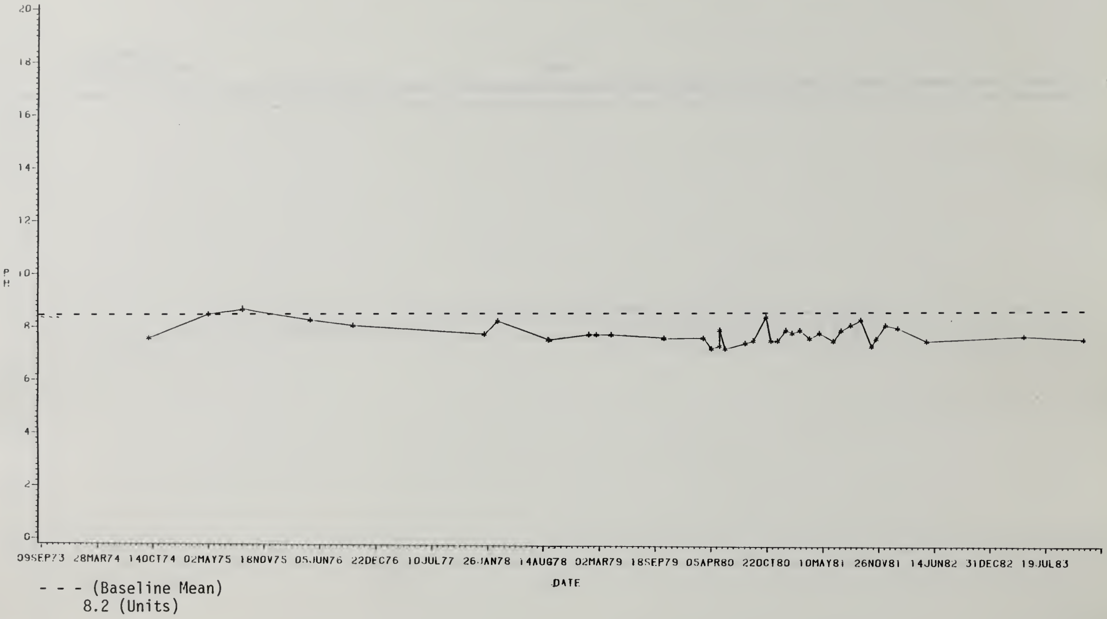


FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS
LOG=WA07



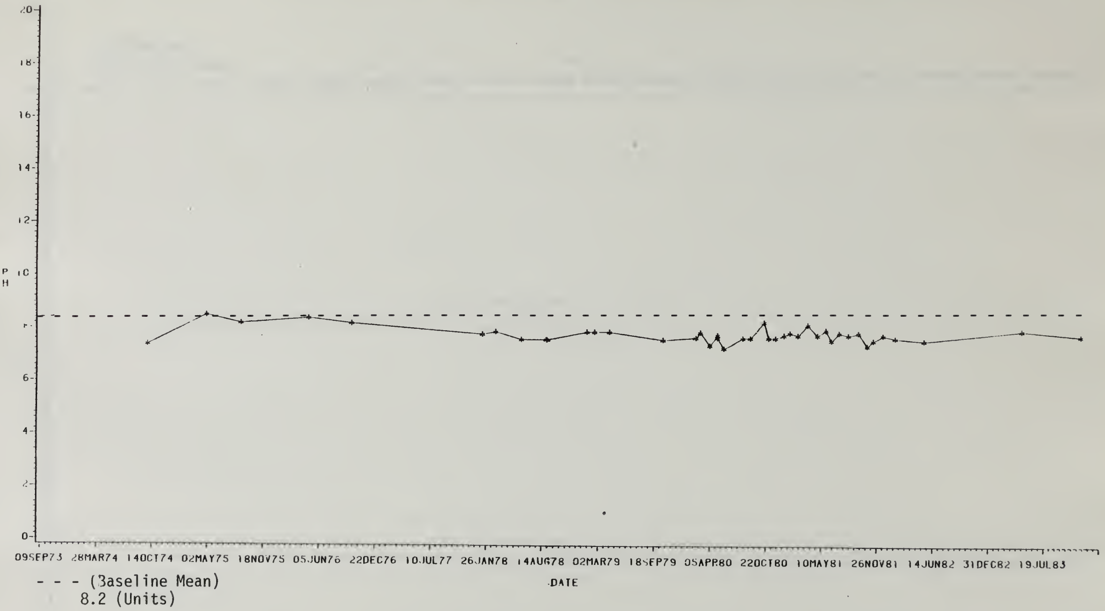
FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS

LOC=WA08

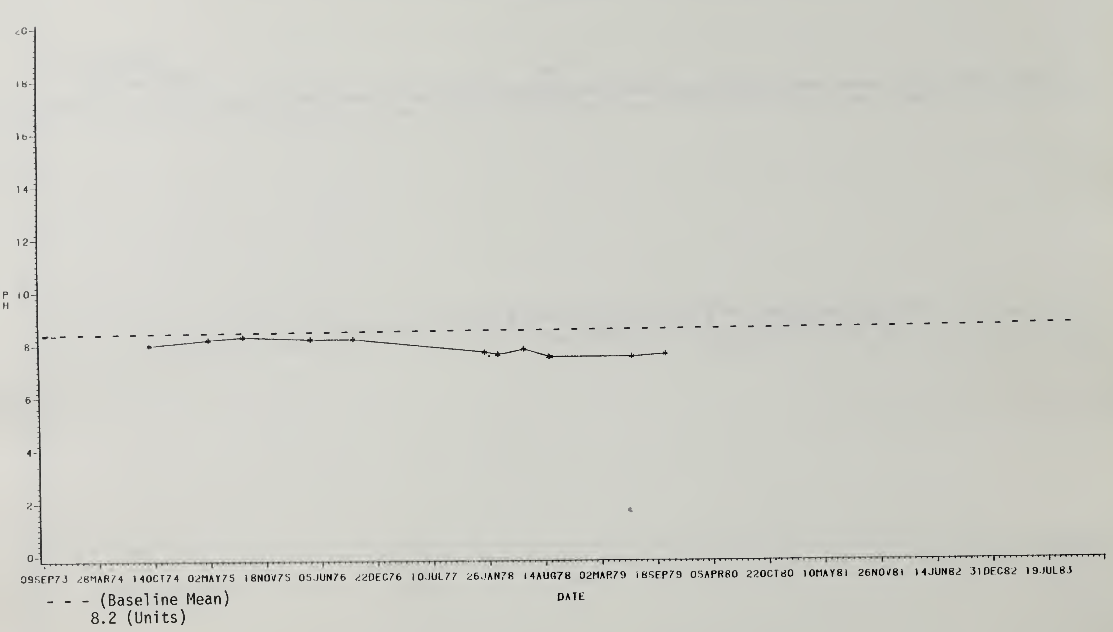


FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS

LOC=WA09

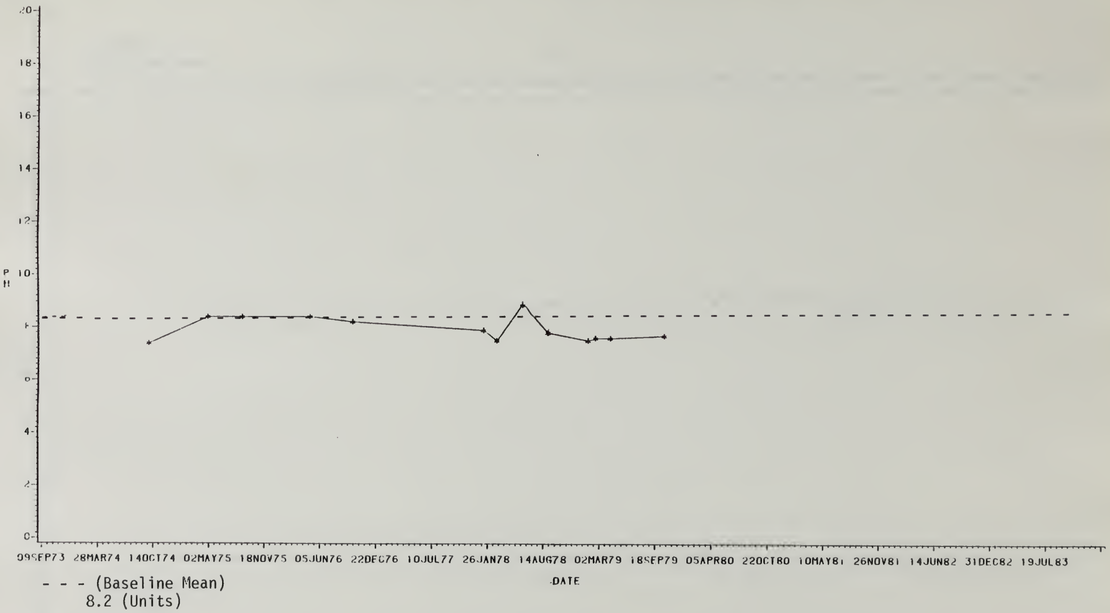


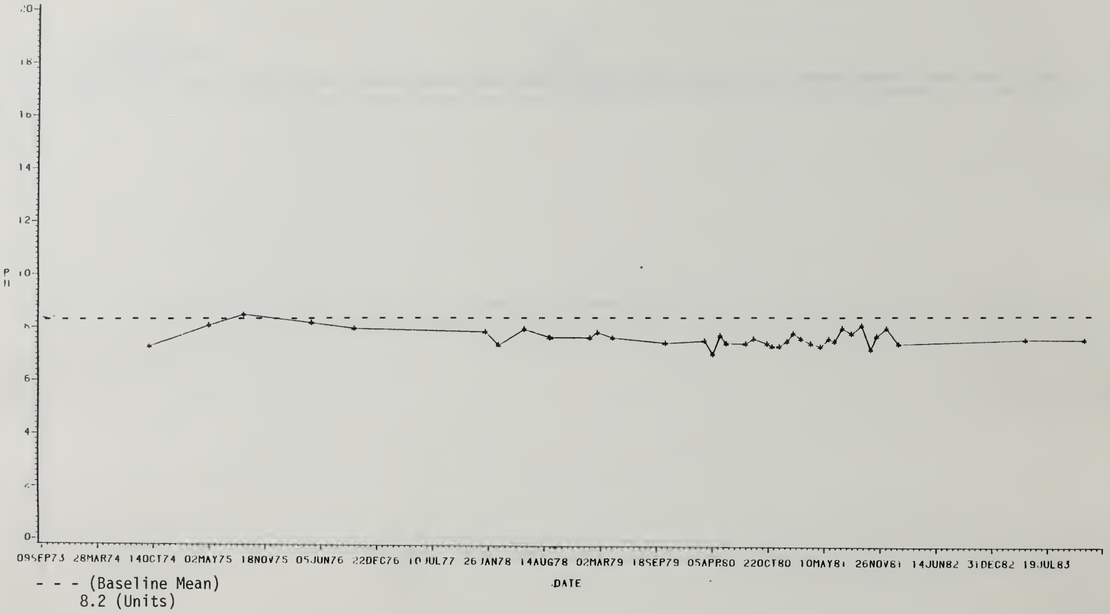
FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS



FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS

LOG=WA11

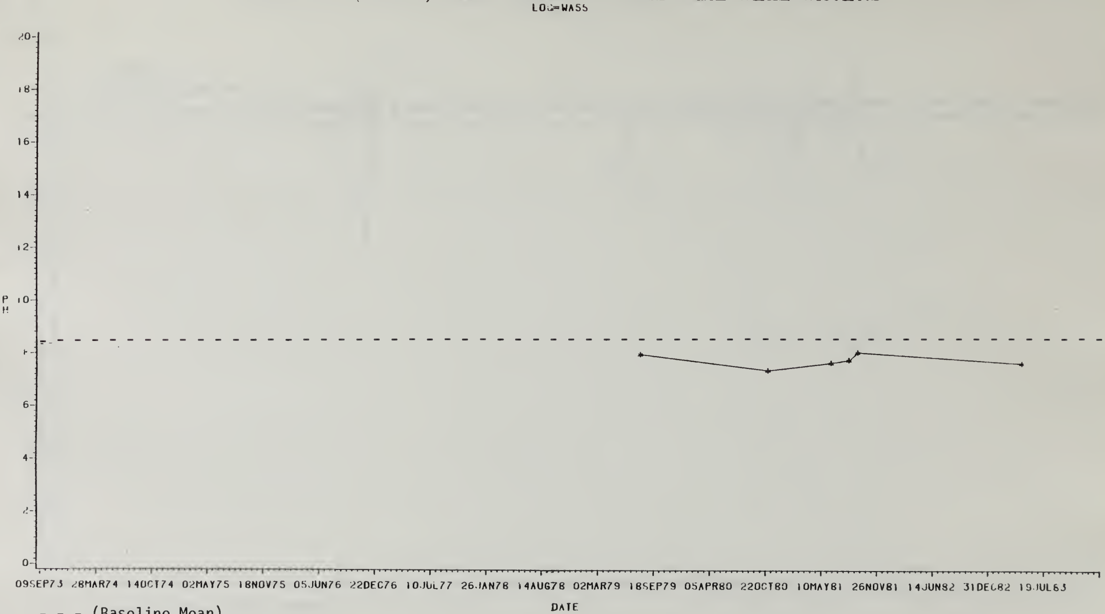




FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS

LOC=WA12

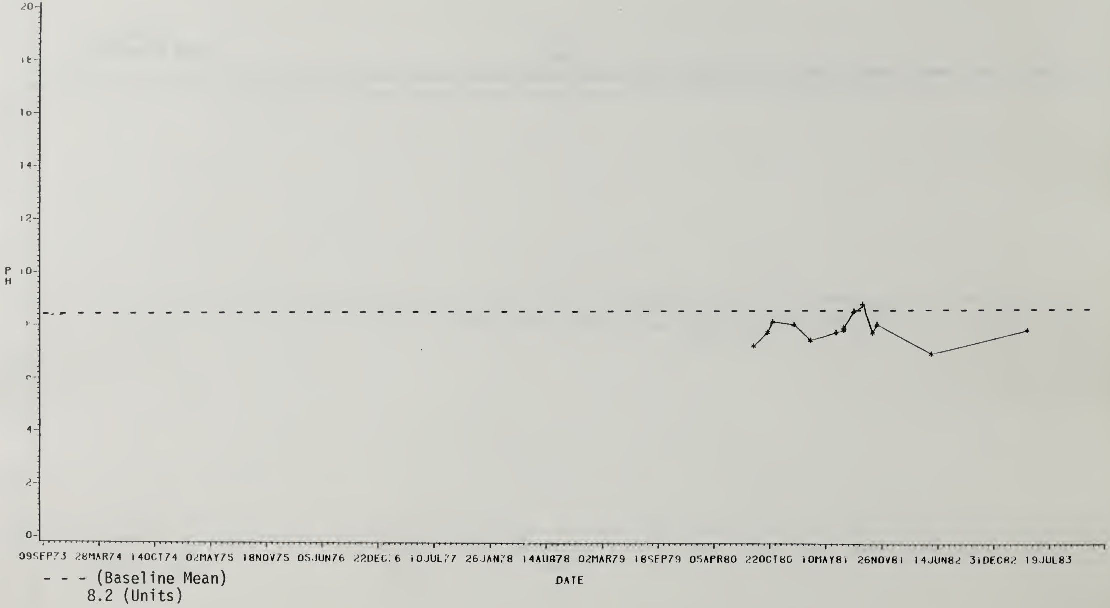
FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS



- - - (Baseline Mean)
8.2 (Units)

FIELD PH (UNITS) TIME SERIES OF ALLUVIAL WELL WATERS

LOC=WAS6



# FIELD SPC (UMHOS) TIME SERIES OF ALLUVIAL WELL WATERS
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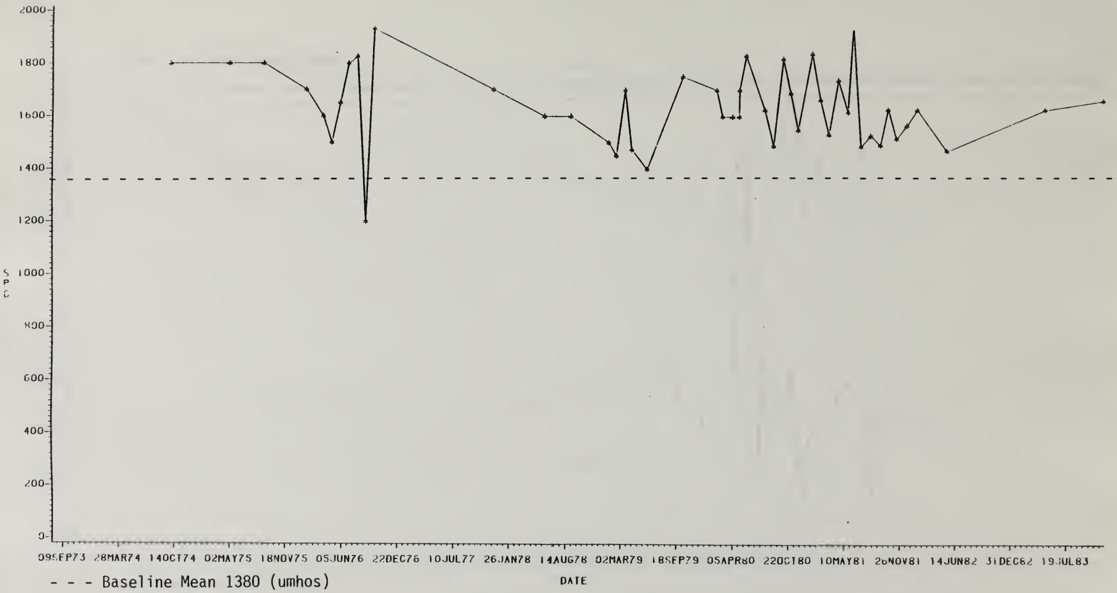
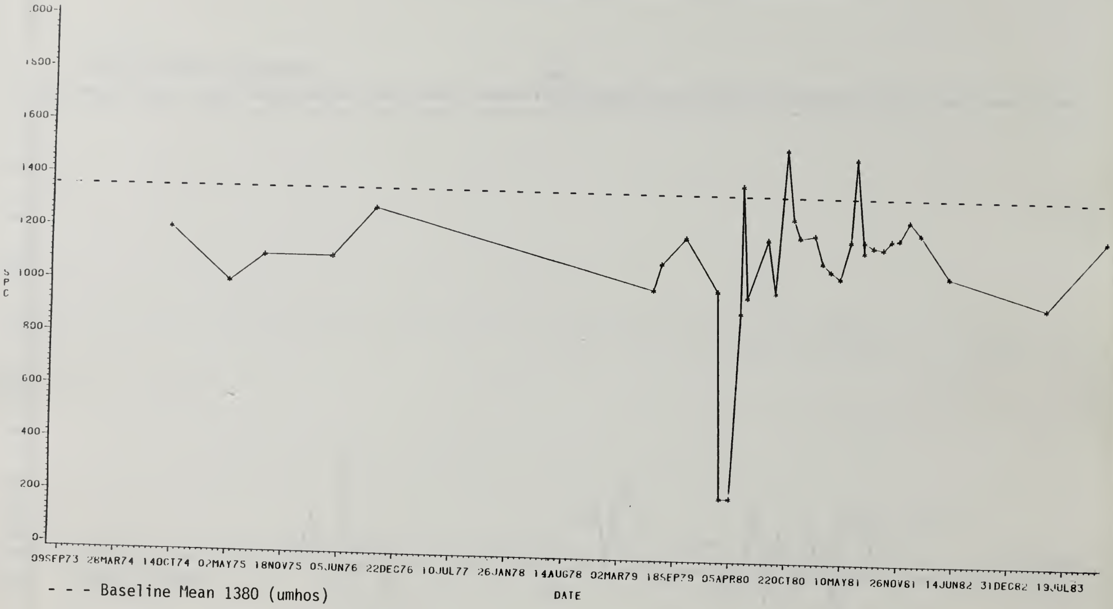
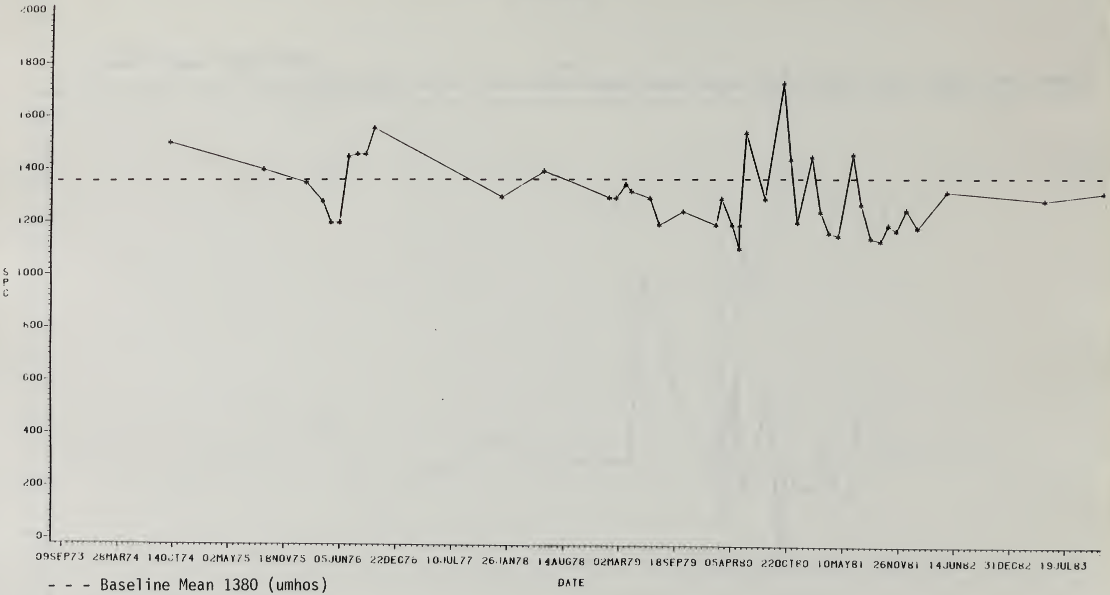


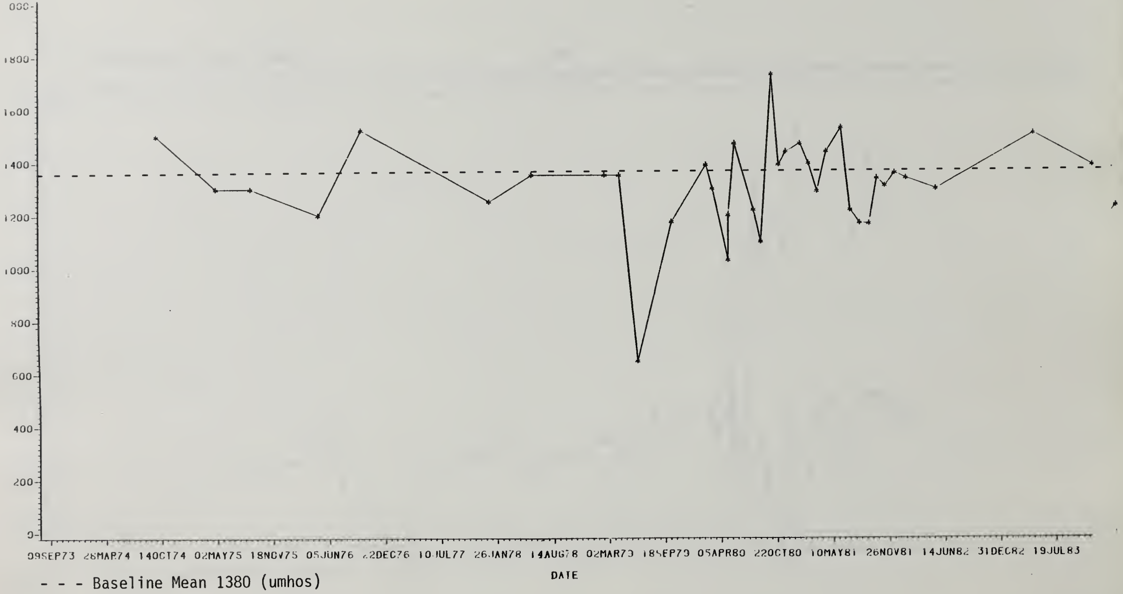
FIELD SPC (UMHOS) TIME SERIES OF ALLUVIAL WELL WATERS
LOC=WA02



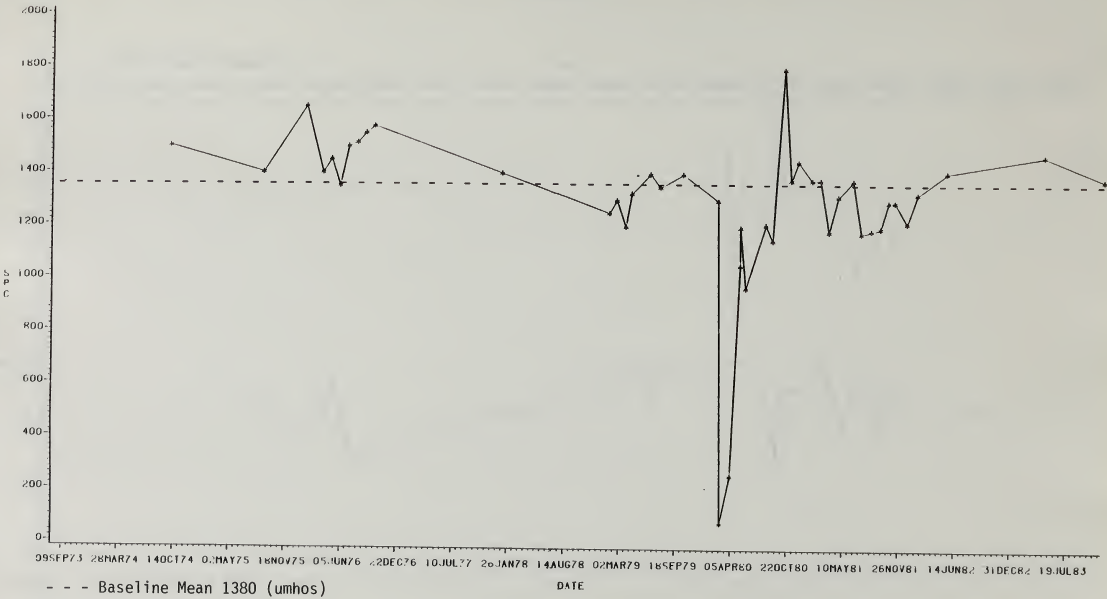
FIELD SPC (UMHOS) TIME SERIES OF ALLUVIAL WELL WATERS
LOC=WA03



FIELD SPC (UMHOS) TIME SERIES OF ALLUVIAL WELL WATERS
LOC=WA05



FIELD SPC (UMHOS) TIME SERIES OF ALLUVIAL WELL WATERS
LOC=WA06



FIELD SPC (UMHOS) TIME SERIES OF ALLUVIAL WELL WATERS
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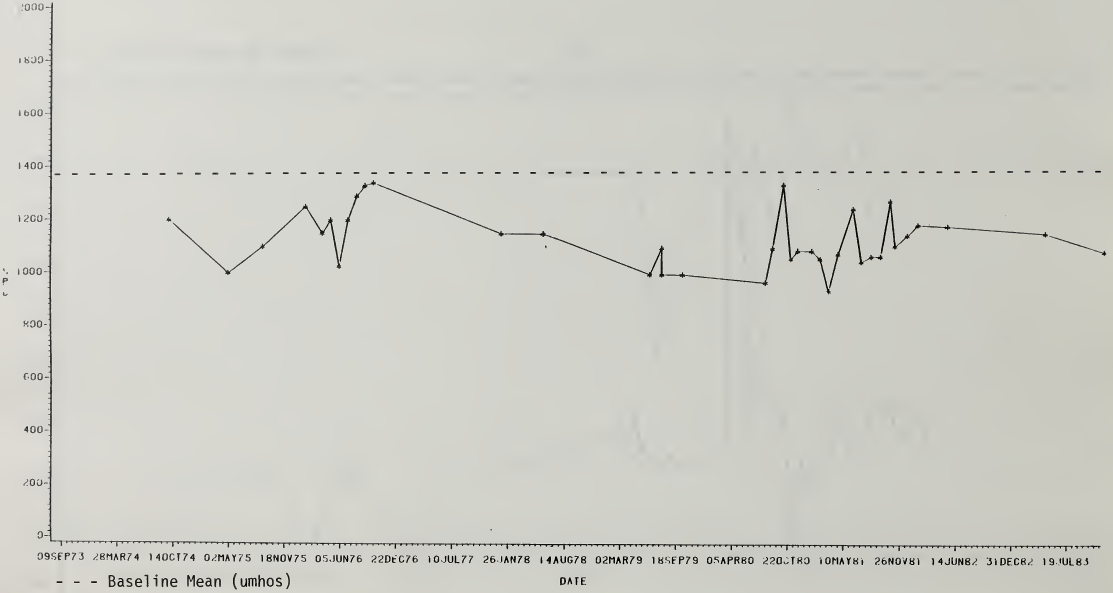
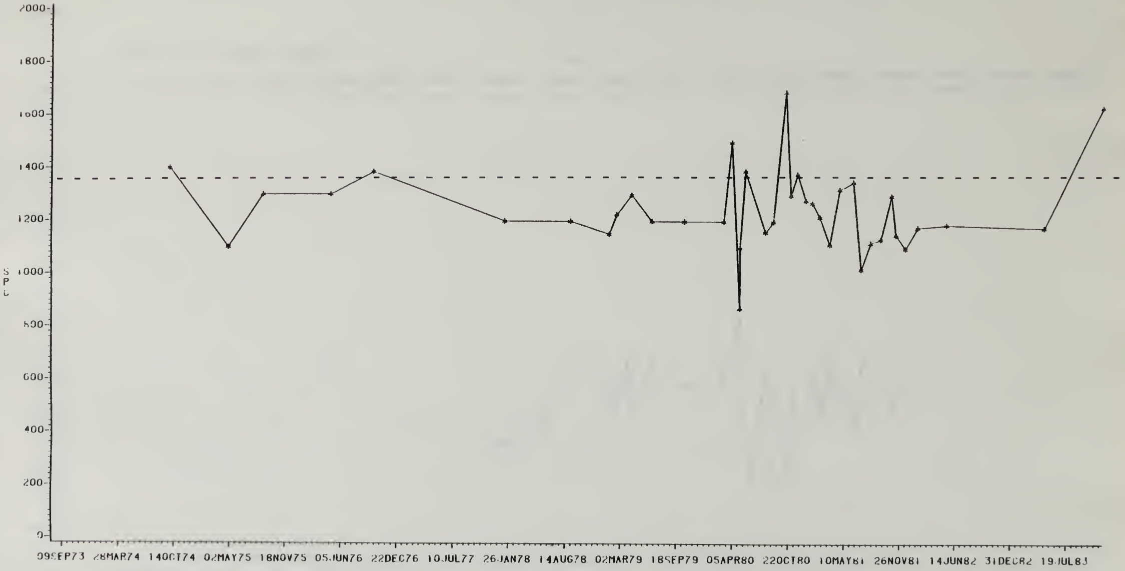
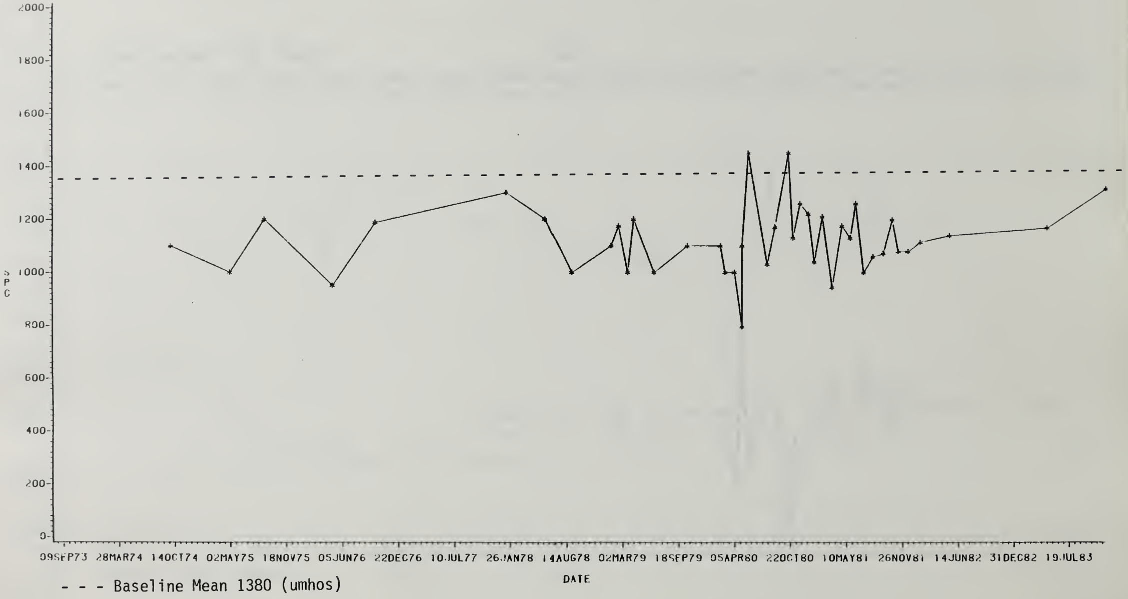


FIELD SPC (UMHOS) TIME SERIES OF ALLUVIAL WELL WATERS
LOC=WA08

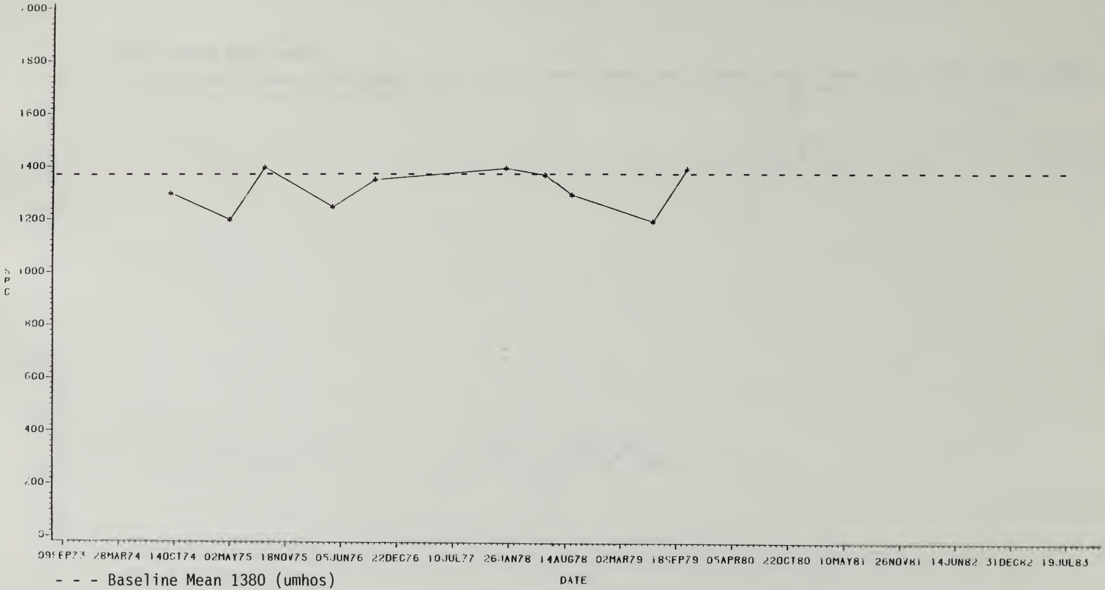


- - - Baseline Mean 1380 (umhos)

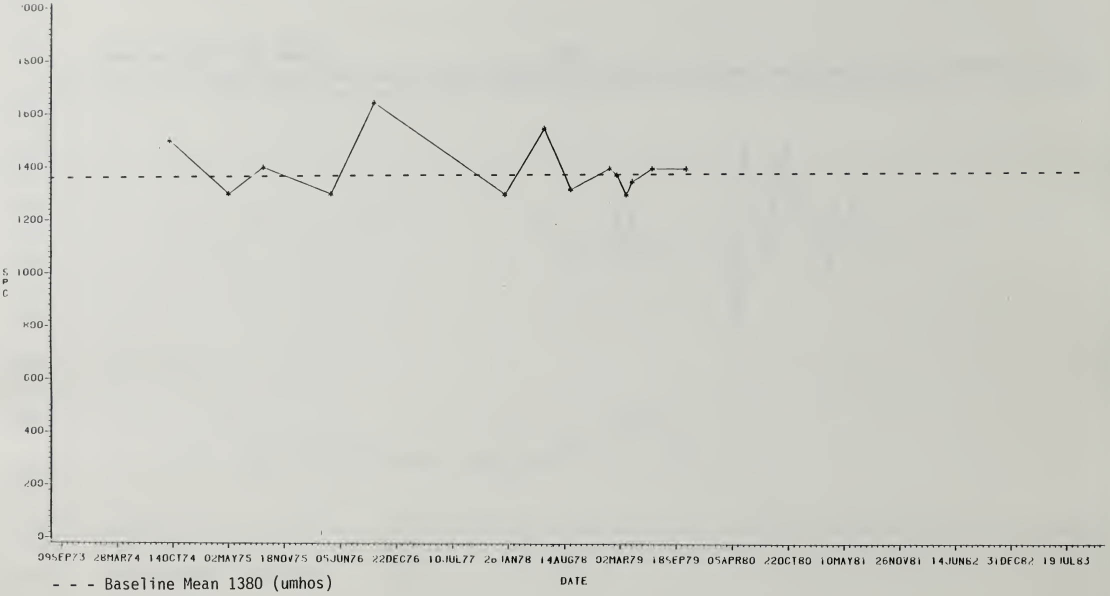
FIELD SPC (UMHOS) TIME SERIES OF ALLUVIAL WELL WATERS
LOC=WA09



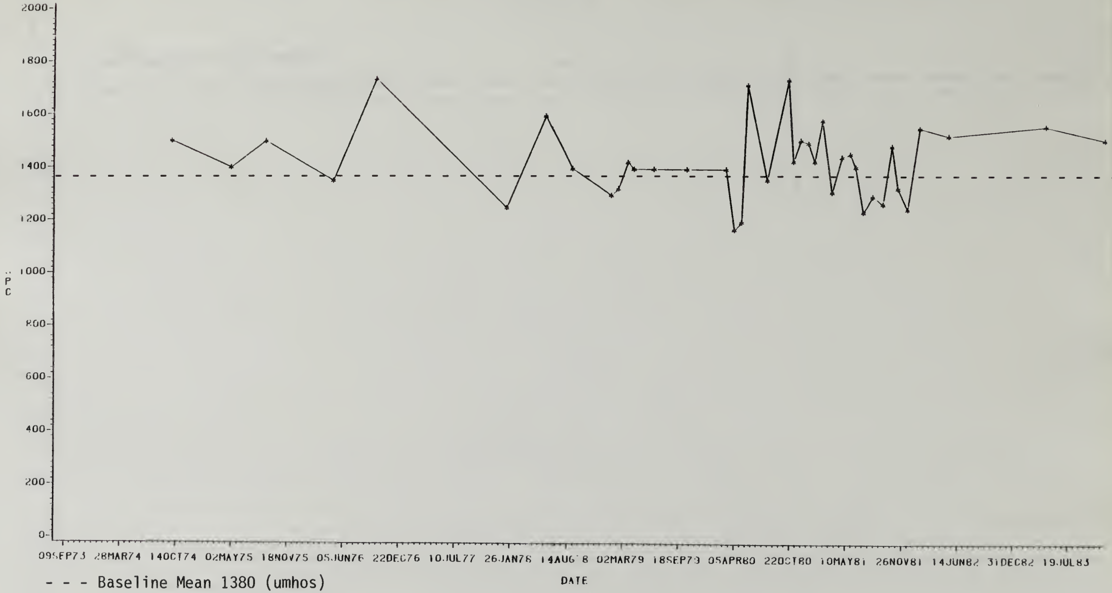
FIELD SPC (UMHOS) TIME SERIES OF ALLUVIAL WELL WATERS
LOC=WA10



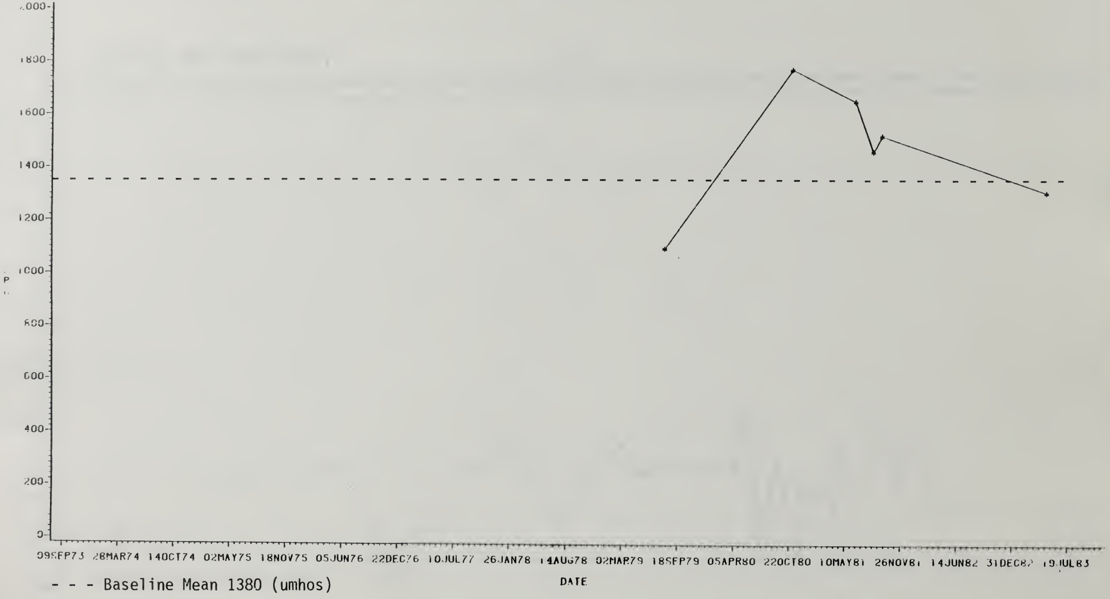
FIELD SPC (UMHOS) TIME SERIES OF ALLUVIAL WELL WATERS
LOC=WA11



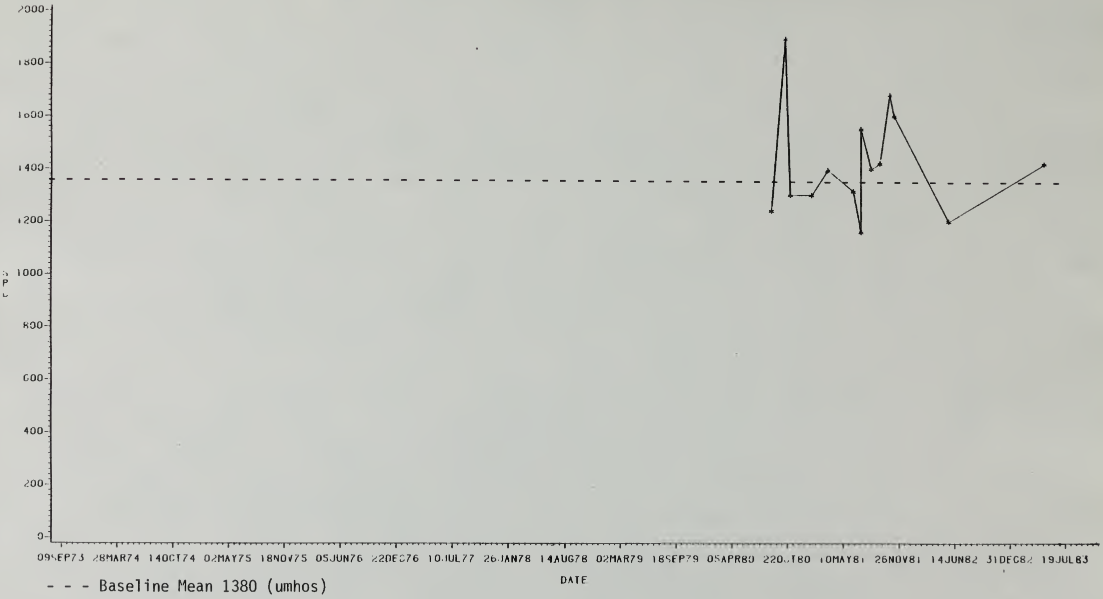
FIELD SPC (UMHOS) TIME SERIES OF A_LUVIAL WELL WATERS
LOC=WA12



FIELD SPC (UMHOS) TIME SERIES OF ALLUVIAL WELL WATERS
LOC=WA55



FIELD SPC (UMHOS) TIME SERIES OF ALLUVIAL WELL WATERS
LOC=WA56



1.2.2.4 Bedrock Wells

During the Interim Monitoring Program water quality samples are taken quarterly or semiannually, depending on the well, for the following parameters.

TABLE 1.2.2.4-1

Parameters Analyzed During IMP

Field Measurements: pH, temperature, dissolved oxygen, conductivity.

As
Mo
Cr
Cu
Fe
Hg
Mn
Radiology
Na
Br
Pb
Ca
Cl
Li
Al
Sr
Se
Zn
COD
Alkalinity
K
HCO_3
Mg
Fluoride
B
BOC
Phenols
Ammonia
Hardness
NO_3
Ba
CO_3
SO_4
TDS
Oil and Grease
SiO_2
Cn
Total phosphate

Field measurements of pH, temperature, specific conductance and field fluoride were taken at eleven wells in June, August, September and November 1983. See Table 1.2.2.4-2.

Samples were taken in June and November 1983 at ten wells. Refer to Tables 1.2.2.4-3 through 1.2.2.4-7 of lab analyses results from UPC_1, UPC_2, LPC_3, LPC_4, Upper Aquifer and Lower Aquifer Bedrock Wells.

Short term statistics of these wells sampled during the 1983 water year were generated and presented in Water Quality Assurance Section 1.2.4.

TABLE 1.2.2.4-2

CB-TRACT
FIELD MEASUREMENTS
BEDROCK MONITORING WELLS

WELL	YR	MO	DY	PH (UNITS)	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (UMHOS)	FIELD FLUORIDE (MG/L)
WD12	83	6	13	9.2	11.0	1190.0	
		7	25				
		8	19				
		9	7				
		10	28				
		11	17	9.2	12.0	1090.0	
			21				
WD20	83	6	15	9.5	14.0	1670.0	
		7	7				
		8	26				
		9	14				
		10	31				
		11	16				
			17	9.5	13.0	1440.0	
WD57	83	6	15	7.8	16.0	1260.0	
		8	4				
		11	16	7.9	10.0	1080.0	
WD90	83	6	7				
		7	6				
		8	3				
			16	7.6	15.0	2170.0	.2
		9	12				
		10	24				
		11	18	8.5	10.0	1940.0	.2
			28				
WE20	83	6	15	9.2	15.0	3240.0	
		7	7				
		8	26				
		9	14				
		10	31				
		11	16				
			17	9.2	11.0	2620.0	
WG12	83	6	13	8.5	12.0	4670.0	
		7	25				
		8	19				
		9	7				
		10	28				
		11	17	8.7	12.0	4460.0	
			21				

TABLE 1.2.2.4-2 (cont'd)

CB-TRACT
FIELD MEASUREMENTS
BEDROCK MONITORING WELLS

WELL	YR	MO	DY	PH (UNITS)	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (UMHOS)	FIELD FLUORIDE (MG/L)
WG20	83	6	15	9.4	15.5	3050.0	
		7	7				
		8	26				
		9	14				
		10	31				
		11	16	9.4	12.0	2520.0	

TABLE 1.2.2.4-2 (cont'd)

CB-TRACT
QUARTER AND SEMIANNUAL FIELD MEASUREMENTS
UPPER AQUIFER BEDROCK WELLS

WELL	YR	MO	PH PH UNIT	SPECIFIC CONDUCTANCE (UMHOS/CM)	TEMPERATURE (DEG C)	FIELD FLUORIDE (MG/L)
WX32	83	6				
			8.4	1030.0	17.0	
		7				
		8				
		9				
		10				
		11	8.6	850.0	15.0	
WX44	83	6				
		7				
		8	9.1	1020.0	12.0	
		9	9.0	1020.0	12.0	

TABLE 1.2.2.4-2 (cont'd)

CB-TRACT
QUARTER AND SEMIANNUAL FIELD MEASUREMENTS
LOWER AQUIFER BEDROCK WELLS

WELL	YR	MO	PH PH UNIT	SPECIFIC CONDUCTANCE (UMHOS/CM)	TEMPERATURE (DEG C)	FIELD FLUORIDE (MG/L)
WY45	83	6				
		7				
		8	8.4	1160.0	13.0	
		9	8.5	1180.0	13.0	
WY81	83	6				
		7				
		8				
		9				
		10				
		11	8.6	1770.0	12.0	

TABLE 1.2.2.4-3

CB-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
UPC1 BEDROCK WELLS

WELL	YR	MO	MO (MG/L)	NO3 (MG/L)	OIL AND GREASE (MG/L)	PHENOLS (MG/L)	K (MG/L)	B (MG/L)	TOTAL DISS SOLIDS (MG/L)	SR (MG/L)	SO4 (MG/L)	CL (MG/L)	COD (MG/L)	CR (MG/L)	CU (MG/L)
WD12	83	6	-.010	-.50	-10.0	-.0100	.7	1.80	790.0	5.3	140.0	43.0	-50.0	-.020	-.020
		11	.060	-.50	-10.0	-.0100	.8	-.10	720.0	5.0	100.0	43.0	-50.0	-.020	-.020
WD20	83	6	.060	-.50	-10.0	-.0100	3.4	-.10	1100.0	-.5	120.0	36.0	-50.0	-.020	-.020
		11	.080	-.50	-10.0	-.0100	1.6	1.80	870.0	1.0	7.0	37.0	-50.0	-.020	-.020
WD57	83	6	.100	.60	-10.0	-.0100	2.2	-.10	800.0	8.7	170.0	22.0	-50.0	-.020	-.020
		11	.100	-.50	-10.0	-.0100	2.1	-.10	750.0	8.7	150.0	29.0	-50.0	-.020	-.020

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.4-3 (cont'd)

CB-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
UPC1 BEDROCK WELLS

WELL	YR	MO	SIO2 (MG/L)	CN (MG/L)	TOTAL PHOSPHATE (MG/L)	N KJELD. (MG/L)	HG (MG/L)	SE (MG/L)	AG (MG/L)	ZN (MG/L)	PB (MG/L)	LI (MG/L)	MN (MG/L)	FE (MG/L)	F (MG/L)
WD12	83	6	.4		-.01	.90	-.00020	-.010		-.020	.020	-.05	-.020	-.02	2.90
		11	4.1		.06	.90	-.00020	-.010		-.020	-.020	-.05	-.020	.03	2.90
WD20	83	6	-.5		-.01	.90	-.00020	-.010		-.020	.040	.20	.020	-.02	24.00
		11	1.0		.01	1.00	-.00020	-.010		-.020	-.020	-.05	-.020	-.02	25.00
WD57	83	6	20.0		-.01	.20	-.00020	-.010		.030	.060	.08	.020	.02	1.00
		11	2.3		.14	.20	-.00020	-.100		.070	-.020	-.05	-.020	-.02	22.00

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.4-3 (cont'd)

CB-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
UPC1 BEDROCK WELLS

WELL	YR	MO	TOTAL ALK (MG/L CACO3)	AL (MG/L)	AMMONIA AS N (MG/L)	AS (MG/L)	BA (MG/L)	HCO3 (MG/L CACO3)	CO3 (MG/L CACO3)	BR (MG/L)	HARDNESS (MG/L CACO3)	NA (MG/L)	MG (MG/L)	CA (MG/L)
WD12	83	6	420.0	-.100	.700	-.020	-.50	360.0	60.0	.200	220.0	140.0	48.0	7.1
		11	420.0	.100	.800	-.020	-.50	400.0	20.0	.200	360.0	180.0	46.0	69.0
WD20	83	6	600.0	-.010	.600	-.020	-.50	500.0	100.0	.100	71.0	310.0	15.0	3.8
		11	600.0	-.100	.700	-.020	-.50	520.0	80.0	-.100	71.0	360.0	3.4	23.0
WD57	83	6	400.0	-.100	.200	-.020	-.50	400.0	-1.0	.800	270.0	140.0	47.0	30.0
		11	420.0	-.100	.200	-.020	-.50	400.0	3.0	.700	870.0	150.0	48.0	270.0

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.4-4

CB-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
UPC2 BEDROCK WELLS

WELL	YR	MO	MO (MG/L)	NO3 (MG/L)	OIL AND GREASE (MG/L)	PHENOLS (MG/L)	K (MG/L)	B (MG/L)	TOTAL DISS SOLIDS (MG/L)	SR (MG/L)	SO4 (MG/L)	CL (MG/L)	COD (MG/L)	CR (MG/L)	CU (MG/L)
WE20	83	6	.010	-.50	-10.0	-.0100	8.0	1.90	1900.0	1.0	100.0	77.0	-50.0	-.020	-.020
		11	.070	-.50	-10.0	-.0100	7.6	1.50	1700.0	1.3	13.0	72.0	-50.0	-.020	-.020

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.4-4 (cont'd)

CB-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
UPC2 BEDROCK WELLS

WELL	YR	MO	SIO2 (MG/L)	CN (MG/L)	TOTAL PHOSPHATE (MG/L)	N KJELD. (MG/L)	HG (MG/L)	SE (MG/L)	AG (MG/L)	ZN (MG/L)	PB (MG/L)	LI (MG/L)	MN (MG/L)	FE (MG/L)	F (MG/L)
WE20	83	6	2.5		-.01	1.50	-.00020	-.010		-.020	.080	.20	-.020	.03	26.00
		11	2.9		6.20	1.40	-.00020	-.010		-.020	-.020	-.05	-.020	.10	25.00

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.4-4 (cont'd)

CB-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
UPC2 BEDROCK WELLS

WELL	YR	MO	TOTAL ALK (MG/L CACO3)	AL (MG/L)	AMMONIA AS N (MG/L)	AS (MG/L)	BA (MG/L)	HCO3 (MG/L CACO3)	CO3 (MG/L CACO3)	BR (MG/L)	HARDNESS (MG/L CACO3)	NA (MG/L)	MG (MG/L)	CA (MG/L)
WE20	83	6	1400.0	-.100	1.200	-.020	-.50	1200.0	200.0	-.100	11.0	690.0	2.2	.7
		11	1400.0	-.100	1.100	-.020	-.50	1300.0	100.0	-.100	13.0	710.0	3.1	-.5

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.4-5

CB-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
LPC3 AND LPC4 BEDROCK WELLS

WELL	YR	MO	MO (MG/L)	NO3 (MG/L)	OIL AND GREASE (MG/L)	PHENOLS (MG/L)	K (MG/L)	B (MG/L)	TOTAL DISS SOLIDS (MG/L)	SR (MG/L)	SO4 (MG/L)	CL (MG/L)	COD (MG/L)	CR (MG/L)	CU (MG/L)
WG12	83	6	.050	-.50	-10.0	-.0100	10.0	6.60	3200.0	.5	120.0	180.0	-50.0	-.020	-.020
		11	.090	-.50	-10.0	-.0100	16.0	7.60	3100.0	1.0	5.0	160.0	-50.0	-.020	-.020
WG20	83	6	.030	-.50	-10.0	-.0100	7.1	1.60	1800.0	-.5	75.0	73.0	-50.0	-.020	-.020
		11	.080	-.50	-10.0	-.0100	6.0	1.10	1700.0	.7	13.0	60.0	-50.0	-.020	-.020

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.4-5 (cont'd)

CB-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
LPC3 AND LPC4 BEDROCK WELLS

WELL	YR	MO	SIO2 (MG/L)	CN (MG/L)	TOTAL PHOSPHATE (MG/L)	N KJELD. (MG/L)	HG (MG/L)	SE (MG/L)	AG (MG/L)	ZN (MG/L)	PB (MG/L)	LI (MG/L)	MN (MG/L)	FE (MG/L)	F (MG/L)
WG12	83	6	14.0		-.01	3.90	-.00020	-.010		-.020	.100	.60	-.020	.20	25.00
		11	.2		-.01	3.50	-.00020	-.010		.030	-.020	.10	-.020	.20	25.00
WG20	83	6	1.2		-.01	1.60	-.00020	-.010		-.020	.090	.20	-.020	.10	22.00
		11	1.5		.02	1.60	-.00020	-.010		.020	-.020	-.05	-.020	.20	23.00

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.4-5 (cont'd)

CB-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
LPC3 AND LPC4 BEDROCK WELLS

WELL	YR	MO	TOTAL ALK (MG/L CACO3)	AL (MG/L)	AMMONIA AS N (MG/L)	AS (MG/L)	BA (MG/L)	HCO3 (MG/L CACO3)	CO3 (MG/L CACO3)	BR (MG/L)	HARDNESS (MG/L CACO3)	NA (MG/L)	MG (MG/L)	CA (MG/L)
WG12	83	6	2600.0	-.100	3.400	-.020	-.50	2500.0	100.0	3.800	55.0	1200.0	4.9	1.1
		11	2600.0	-.100	3.200	-.020	-.50	2400.0	5.0	3.600	23.0	1200.0	5.6	-.5
WG20	83	6	1400.0	-.100	1.300	-.020	-.50	1100.0	300.0	-.100	7.0	670.0	1.4	.5
		11	1400.0	-.100	1.200	-.020	-.50	1200.0	200.0	-.100	8.0	630.0	2.0	-.5

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.4-6

CB-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
UPPER AQUIFER BEDROCK WELLS

WELL	YR	MO	MO (MG/L)	NO3 (MG/L)	OIL AND GREASE (MG/L)	PHENOLS (MG/L)	K (MG/L)	B (MG/L)	TOTAL DISS SOLIDS (MG/L)	SR (MG/L)	SO4 (MG/L)	CL (MG/L)	COD (MG/L)	CR (MG/L)	CU (MG/L)
WX32	83	6	-.010	-.50	-10.0	-.0100	.8	1.60	660.0	1.7	-1.0	21.0	-50.0	-.020	-.020
		11	.060	-.50	-10.0	-.0100	1.4	-.10	560.0	1.3	21.0	59.0	-50.0	-.020	-.020
WX44	83	8	-.010	-.50	48.0	-.0100	3.0	-.10	750.0	5.0	200.0	19.0	-50.0	-.020	.020
		9	-.010	-.50	-10.0	-.0100	2.7	-.10	700.0	7.2	120.0	26.0	-50.0	-.020	.100

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.4-6 (cont'd)

CB-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
UPPER AQUIFER BEDROCK WELLS

WELL	YR	MO	SIO2 (MG/L)	CN (MG/L)	TOTAL PHOSPHATE (MG/L)	N KJELD. (MG/L)	HG (MG/L)	SE (MG/L)	AG (MG/L)	ZN (MG/L)	PB (MG/L)	LI (MG/L)	MN (MG/L)	FE (MG/L)	F (MG/L)
WX32	83	6	.7		-.01	2.80	-.00020	-.010		-.020	.020	-.05	.070	.02	18.00
		11	4.6		.06	.90	-.00020	-.010		-.020	-.020	-.05	.070	-.02	18.00
WX44	83	8	-.1		-.01		-.00020	-.010		-.020	.030	.05	.020	.05	6.60
		9	.3		-.01		-.00020	-.010		.500	.040	.05	.060	1.70	6.50

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.4-6 (cont'd)

CB-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
UPPER AQUIFER BEDROCK WELLS

WELL	YR	MO	TOTAL ALK (MG/L CACO3)	AL (MG/L)	AMMONIA AS N (MG/L)	AS (MG/L)	BA (MG/L)	HCO3 (MG/L CACO3)	CO3 (MG/L CACO3)	BR (MG/L)	HARDNESS (MG/L CACO3)	NA (MG/L)	MG (MG/L)	CA (MG/L)
WX32	83	6	470.0	-.100	2.200	-.020	-.50	460.0	10.0	.200	19.0	160.0	.5	6.8
		11	480.0	-.100	.700	-.020	-.50	470.0	10.0	.200	180.0	220.0	6.4	60.0
WX44	83	8	410.0	-.100	.900	-.020	-.50	390.0	20.0	.400	250.0	230.0	43.0	30.0
		9	350.0	-.100	1.200	-.020	-.50	330.0	20.0	.200	290.0	230.0	68.0	6.0

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.4-7

CB-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
LOWER AQUIFER BEDROCK WELLS

WELL	YR	MO	MO (MG/L)	NO3 (MG/L)	OIL AND GREASE (MG/L)	PHENOLS (MG/L)	K (MG/L)	B (MG/L)	TOTAL DISS SOLIDS (MG/L)	SR (MG/L)	SO4 (MG/L)	CL (MG/L)	COD (MG/L)	CR (MG/L)	CU (MG/L)
WY45	83	8	-.010	-.50	57.0	-.0100	7.9	1.10	950.0	-.5	15.0	23.0	-50.0	-.020	.020
		9	-.010	-.50	21.0	-.0100	8.9	1.20	940.0	.6	13.0	10.0	-50.0	-.020	-.020
WY81	83	7	.020	-.50	-10.0	-.0100	2.4	1.60	1400.0	1.7	84.0	8.0	-50.0	-.020	-.020
		11	.050	1.00	-10.0	-.0100	2.2	.30	1100.0	1.7	25.0	13.0	-50.0	-.020	-.020

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.4-7 (cont'd)

CB-TRACT
QUARTER AND SEMIANNUALWATER QUALITY ANALYSES
LOWER AQUIFER BEDROCK WELLS

WELL	YR	MO	SIO2 (MG/L)	CN (MG/L)	TOTAL PHOSPHATE (MG/L)	N KJELD. (MG/L)	HG (MG/L)	SE (MG/L)	AG (MG/L)	ZN (MG/L)	PB (MG/L)	LI (MG/L)	MN (MG/L)	FE (MG/L)	F (MG/L)
WY45	83	8	.3		-.01		-.00020	-.010		-.020	.040	-.05	-.020	.07	23.00
		9	.3		-.01		-.00020	-.010		.090	.050	-.05	-.020	.20	20.00
WY81	83	7	4.6		-.01	10.40	-.00020	-.010		-.020	.040	.06	-.020	.07	22.00
		11	4.5		.15	9.50	-.00020	-.010		-.020	-.020	-.05	-.020	.20	22.00

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.4-7 (cont'd)

CB-TRACT
QUARTER AND SEMIANNUAL WATER QUALITY ANALYSES
LOWER AQUIFER BEDROCK WELLS

WELL	YR	MO	TOTAL ALK (MG/L CACO3)	AL (MG/L)	AMMONIA AS N (MG/L)	AS (MG/L)	BA (MG/L)	HCO3 (MG/L CACO3)	CO3 (MG/L CACO3)	BR (MG/L)	HARDNESS (MG/L CACO3)	NA (MG/L)	MG (MG/L)	CA (MG/L)
WY45	83	8	640.0	-.100	1.300	-.020	-.50	630.0	10.0	.300	6.5	340.0	.9	1.1
		9	660.0	-.100	1.000	-.020	.50	640.0	20.0	.200	12.0	360.0	1.7	2.0
WY81	83	7	980.0	-.100	9.500	-.020	-.50	980.0	-1.0	-.100	18.0	500.0	2.7	2.9
		11	990.0	-.100	8.700	-.020	-.50	970.0	20.0	-.100	65.0	430.0	3.1	21.0

NOTE: - INDICATES LESS THAN

IMPOUNDMENTS/
LAND APPLICATION/
REINJECTION/DISCHARGE

1.2.2.5 Impoundments/Land Application/Reinjection/ Discharge

Data reported in this section comply with NPDES permit changes during this report period. Effective October 1, 1983 the NPDES permit was renewed. Changes were made regarding sampling and reporting requirements.

Water samples were taken at A/B discharge point (WN40), on weekly and monthly intervals during June through November 1983. Data tables of these samples are reported in Table 1.2.2.5-1 and 1.2.2.5-2.

At one-time sample of continuous discharge is required by the renewed permit and the lab analyses reported no later than 90 days after the effective date of the permit. This sample was taken on October 11, 1983 for the following data suite presented in Table 1.2.2.5-3. Bottle samples were sent to Camp Dresser and McKee, Inc. (CDM) to run lab analyses of radioactivity and cyanide. These results are pending and will be reported in the July 1984 data report. This sample is to be repeated during intermittant discharge (which applies to the next occurrence of discharge). Within the same table are analyses results of a semi-annual sample taken in July 1983, which was a requirement under the old NPDES permit.

TABLE 1.2.2.5-1

CB-TRACT
NPDES WATER QUALITY SAMPLES
WEEKLY ANALYSIS

LOC	YR	MO	DY	LAB TOTL SUSS SOLIDS (MG/L)	TOTAL DISSOLVED SOLIDS (MG/L)	TOTAL F (MG/L)	TOTAL B (MG/L)	AMMONIA AS N (MG/L)	TOTAL PHENOL (MG/L)	AL (MG/L)	TOTAL FE (MG/L)	OIL AND GREASE (MG/L)
WN40	83	6	2	-10.0	1300.0	19.00	1.00	.09	-.010	-.1	-.05	-10
			9	-10.0	1400.0	19.00	2.10	-.04	-.010	-.1	.03	-10
			16	-10.0	1300.0	19.00	1.20	.09	-.010	-.1	.02	-10
			23	14.0	1500.0	17.00	1.00	.40	-.010	-.1	.02	-10
			28	-10.0	1300.0	20.00	2.20	-.04	-.010	-.1	.05	-10
		7	14	12.0	1400.0	28.00	.90	.30	-.010	-.1	.04	-10
			21	-10.0	1400.0	31.00	1.50	.10	-.010	-.1	.05	-10
			28	-10.0	1300.0	27.00	2.20	.20	-.010	-.1	.10	-10
		8	4	-10.0	1400.0	24.00	1.00	.20	-.010	-.1	.06	-10
			11	-10.0	1400.0	20.00	1.60	.20	-.010	-.1	.08	-10
			18	-10.0	1400.0	19.00	1.00	.20	-.010	-.1	.03	-10
			25	-10.0	1400.0	22.00	1.60	.80	-.010	-.1	.04	-10
		9	1	-10.0	1400.0	23.00	1.40	.60	-.010	-.1	-.03	-10
			8	-10.0	1400.0	23.00	1.20	.80	-.010	-.1	.02	-10
			15	-10.0	1400.0	20.00	1.40	.05	-.010	-.1	.03	-10
			22	-10.0	1400.0	21.00	1.40	-.04	-.010	-.1	.03	-10
			29	-10.0	1400.0	21.00	1.30	.04	-.010	-.1	.03	-10
		10	6	14.0	1300.0	20.00	1.30	-.04		-.1	.20	-10
			13	16.0	1500.0	19.00	1.40	-.04		-.1	.03	-10
			20	16.0	1500.0	19.00	-.10	-.04		-.1	.02	-10
			27	-10.0	1400.0	19.00	-.10	-.04		-.1	.03	-10
		11	3	-10.0	1600.0	20.00	-.10	-.04		.5	.08	-10
			17	-10.0	1500.0	19.00	-.10	-.04		.1	.07	-10
			22	-10.0	1300.0	19.00	-.10	-.04		-.1	-.02	-10

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.5-2

CB-TRACT
NPDES WATER QUALITY SAMPLES
MONTHLY ANALYSIS

LOC	YR	MO	DY	TOTAL CD (MG/L)	TOTAL CU (MG/L)	TOTAL HG (MG/L)	TOTAL AG (MG/L)	TOTAL ZN (MG/L)
WN40	83	6	2	-.01	-.02	-.00020	-.01	-.02
			9					
			16					
			23					
			28					
		7	14					
			21					
			28					
		8	4	-.01	-.02	-.00020	-.01	-.02
			11					
			18					
			25					
		9	1	-.01	-.02	-.00020	-.01	-.02
			8					
			15					
			22	-.01	-.02	-.00020	-.01	
			29		-.02	-.00020	-.01	
		10	6	-.01	-.02	-.00020	-.01	
			13	-.01	-.02	-.00020	-.01	
			20	-.01	-.02	-.00020	-.01	
			27	-.01	-.02	-.00020	-.01	
		11	3	-.01	.02	-.00020	-.01	
			17	-.01	-.02	-.00020	-.01	
			22	-.01	-.02	-.00020	-.01	

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.5-3

NPDES ONE TIME SAMPLE
WATER QUALITY (MG/L)

LOC	YR	MO	TOTAL ALKALINITY	BROMIDE	CARBONATE	CALCIUM	NITRATE	SULFATE	SULFIDE	BICARBONATE	SILICA
WN40	83	7	1200.0	.2	100.0	5.50	4.8	5.0	-1.0	1100.0	1.0
		11	1200.0		100.0		-.5	6.0	-1.0	1100.0	

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.5-3 (Cont'd)

NPDES ONE TIME SAMPLE
WATER QUALITY (MG/L)

LOC	YR	MO	TOTAL CADMIUM	TOTAL CHROMIUM	TOTAL COPPER	TOTAL IRON	TOTAL LEAD	TOTAL LITHIUM	MAGNESIUM	TOTAL MANGANESE	TOTAL MOLYBDENUM
WN40	83	7	.02	-.02	-.02	.03	.06	.05	4.80	-.02	-.01
		11	-.01	-.02	-.02	.05	-.02				.04

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.5-3 (Cont'd)

NPDES ONE TIME SAMPLE
WATER QUALITY (MG/L)

LOC	YR	MO	TOTAL DISSOLVED SOLIDS	FLUORIDE	BORON	AMMONIA AS N	PHENOL	OIL AND GREASE	TOTAL MERCURY	TOTAL ALUMINUM	TOTAL ARSENIC	TOTAL BARIUM
WN40	83	7	1400.0	22.00	1.00	1.000	-.010	-10.00		-.10	-.02	-.50
		11	1300.0	21.00	-.10	-.040	-.010	-10.00	-.00020		-.02	

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.5-3 (Cont'd)

NPDES SEMI-ANNUAL
WATER QUALITY (MG/L)

LOC	YR	MO	TOTAL NICKEL	TOTAL POTASSIU M	SELENIUM	TOTAL SILVER	TOTAL SODIUM	TOTAL STRONTIUM	TOTAL ZINC	TOTAL TITANIUM	TOTAL VANADIUM	KJELDAHL
WN40	83	7	-.02	3.30	-.0100		660.00	1.30	-.02	-.05	-.05	1.20
		11	-.01			-.01			-.02			

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.5-3 (Cont'd)

NPDES ONE TIME SAMPLE
WATER QUALITY (MG/L)

LOC	YR	MO	TOTAL ZIRCONIUM	TOTAL BERYLLIUM	TOTAL BISMUTH	TOTAL GERMANIUM	TOTAL GALLIUM	CYANIDE	SUSPENDED SOLIDS	DOC
WN40	83	7	10.000			.300	.200		14.00	-1.0
		11							-10.00	

NOTE - INDICATES LESS THAN

TABLE 1.2.2.5-3 (Cont'd)

NPDES ONE TIME SAMPLE
WATER QUALITY (MG/L)

LOC	YR	MO	TOTAL HYDROPHOBICS	HYDROPHOBICS BASES	HYDROPHOBICS ACIDS	HYDROPHOBICS NEUTRALS	TOTAL URANIUM	COD	BOD	TOTAL CHLORINE
WN40	83	7						-50.00	-150.00	23.00
		11								

NOTE: - INDICATES LESS THAN

TABLE 1.2.2.5-3 (Cont'd)

NPDES ONE TIME SAMPLE
WATER QUALITY (MG/L)

LOC	YR	MO	TOTAL HYDROPHILICS	HYDROPHILICS BASES	HYDROPHILICS ACIDS	HYDROPHILICS NEUTRALS	THIOCYANATE	NITRATE/NITRITE
WN40	83	7						1.100
		11						

NOTE: - INDICATES LESS THAN

SHAFT AND
MINE WATER

1.2.2.6 Shaft and Mine Water

No samples were collected in shafts during this report period, June through November 1983.

SUPPLEMENTAL
WATER DATA

1.2.2.7 Supplemental Water Data - Water Quality

This section contains DOC fractionation results of water samples taken at pond seepage well WW22 by CB personnel and three surface stream gauging stations sampled by USGS. These analyses are a requirement of C-b Tract Lease agreement with the Oil Shale Project Office.

C-B TRACT AND USGS DOC FRACTIONATION RESULTS
WATER QUALITY

LOC	YR	MO	DY	DISSOLVED ORGANIC CARBON (PPM C)	TOTAL HYDROPHOBICS (PPM C)	HYDROPHOBICS BASES (PPM C)	HYDROPHOBICS ACIDS (PPM C)	HYDROPHOBICS NEUTRALS (PPM C)	TOTAL HYDROPHILICS (PPM C)	HYDROPHILICS BASES (PPM C)	HYDROPHILICS ACIDS (PPM C)	HYDROPHILICS NEUTRALS (PPM C)
WW22	82	6	1	18.2	6.2	2.1	3.7	.3	12.0	5.3	5.6	1.1
6007	82	11	29	4.6	2.0		1.5	.4	2.5	.4	2.1	
	83	9	6	8.1	3.4		2.7	.7	4.7	.2	3.8	.7
6042	82	11	29	3.5	2.6	.1	1.2	1.3	.9	.1	.8	
	83	6	9	4.9	2.6	.1	1.2	1.4	2.3	.3	.9	1.1
6061	82	11	29	3.8	1.6		1.1	.5	2.2	.3	1.6	.3
	83	6	9	8.5	3.4	.1	2.9	.4	5.1	.4	3.7	1.0

NOTE: - INDICATES LESS THAN

WATER QUALITY ASSURANCE

1.2.4 Water Quality Assurance

Complying with the water monitoring Quality Assurance Program implemented in 1981, an extensive review of all water lab analyses stored in the RAMIS data base water quality files are continuing to be checked for incorrect values entered. Data screening is a method for detecting errors occurring from field sampling through data handling and reporting. No new data corrections were made during this report period (June through November 1983).

Statistics were run on wells sampled during the 1983 water year (October 1, 1982 - September 30, 1983). Variables included in the statistics are the number of values for each chemical analyzed, the number of zero values present, the percentage of occurrence of zero values present, mean value, maximum value, minimum value and standard deviation. Following are tables presented for wells analyzed:

Table	Title	Page No.
Table 1.2.4-1	Well - WD12	I-568
Table 1.2.4-2	Well - WD20	I-570
Table 1.2.4-3	Well - WD57	I-572
Table 1.2.4-4	Well - WE20	I-574
Table 1.2.4-5	Well - WG12	I-576
Table 1.2.4-6	Well - WG20	I-578
Table 1.2.4-7	Well - WX32	I-580
Table 1.2.4-8	Well - WX44	I-582
Table 1.2.4-9	Well - WY45	I-584
Table 1.2.4-10	Well - WY81	I-586

Other aspects of the water quality assurance program for sampling methodology and logging, field tests, analytical methods and quality control in the laboratory, data record keeping and inspection, and outlier detection are ongoing procedures to assure that the end results of our data sampling are correct to the best of our knowledge.

The procedures formulated in the Quality Assurance Program for Hydrology are designed to comply with monitoring and analytical practices approved by the Environmental Protection Agency, the United States Geological Survey and other appropriate groups.

In conjunction with implementation of the Quality Assurance Program, the Cathedral Bluffs' Environmental Services Department carries out routine assessment inspections of the field sites to evaluate the operation of the program. These inspections have been helpful in maintaining full compliance with the quality assurance procedures, making necessary adjustments to the program, and introducing alterations suggested by the experience of the field monitoring personnel.

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                    DESCRIPTIVE STATISTICS FOR WELLS SAMPLED DURING 1983 WATER YEAR
                                  OCTOBER 1,1982 - SEPTEMBER 30,1983

LOC   LOC   CHEMICAL    NVALUES     NZERO    PERCENT     MEANVAL     MAXVAL     MINVAL      STDDEV

WD12  WD12  AG                0         .          .           .          .          .           .
      WD12  AL                2         2    1.00000        0.00       0.00       0.00       0.000
      WD12  ALPHA             0         .          .           .          .          .           .
      WD12  AS                2         2    1.00000        0.00       0.00       0.00       0.000
      WD12  B                 2         0    0.00000        1.00       1.80       0.20       1.131
      WD12  BA                2         2    1.00000        0.00       0.00       0.00       0.000
      WD12  BE                0         .          .           .          .          .           .
      WD12  BETA              0         .          .           .          .          .           .
      WD12  BOD               0         .          .           .          .          .           .
      WD12  BR                2         1    0.50000        0.10       0.20       0.00       0.141
      WD12  CA                2         0    0.00000        7.50       7.90       7.10       0.566
      WD12  CD                0         .          .           .          .          .           .
      WD12  CH                0         .          .           .          .          .           .
      WD12  CL                2         0    0.00000       25.75      43.00       8.50      24.395
      WD12  CO                0         .          .           .          .          .           .
      WD12  COD               2         2    1.00000        0.00       0.00       0.00       0.000
      WD12  CO3               2         0    0.00000       40.00      60.00      20.00      28.284
      WD12  CR                2         2    1.00000        0.00       0.00       0.00       0.000
      WD12  CS                0         .          .           .          .          .           .
      WD12  CU                2         1    0.50000        0.01       0.02       0.00       0.014
      WD12  CYAN              0         .          .           .          .          .           .
      WD12  DATE              2         0    0.00000     8466.50    8564.00    8369.00     137.886
      WD12  DOC               2         2    1.00000        0.00       0.00       0.00       0.000
      WD12  F                 2         0    0.00000        2.75       2.90       2.60       0.212
      WD12  FCOLIF            0         .          .           .          .          .           .
      WD12  FE                2         1    0.50000        0.01       0.02       0.00       0.014
      WD12  GA                0         .          .           .          .          .           .
      WD12  GE                0         .          .           .          .          .           .
      WD12  HARD              2         0    0.00000      225.00     230.00     220.00       7.071
      WD12  HCO3              2         0    0.00000      410.00     460.00     360.00      70.711
      WD12  HG                2         2    1.00000        0.00       0.00       0.00       0.000
      WD12  I                 0         .          .           .          .          .           .
      WD12  K                 2         0    0.00000        0.60       0.70       0.50       0.141
      WD12  KJN               1         0    0.00000        0.90       0.90       0.90           .
      WD12  LAS               0         .          .           .          .          .           .
      WD12  LI                2         2    1.00000        0.00       0.00       0.00       0.000
      WD12  MA                0         .          .           .          .          .           .
      WD12  MG                2         0    0.00000       49.00      50.00      48.00       1.414
      WD12  MN                2         1    0.50000        0.01       0.02       0.00       0.014
      WD12  MOLY              2         2    1.00000        0.00       0.00       0.00       0.000
      WD12  NA                2         0    0.00000      175.00     210.00     140.00      49.497
      WD12  NH3               2         0    0.00000        0.60       0.70       0.50       0.141
      WD12  NI                0         .          .           .          .          .           .
      WD12  NO3               2         2    1.00000        0.00       0.00       0.00       0.000
      WD12  OH                0         .          .           .          .          .           .
      WD12  OLGR              2         2    1.00000        0.00       0.00       0.00       0.000
      WD12  PA                0         .          .           .          .          .           .
      WD12  PB                2         0    0.00000        0.02       0.02       0.02       0.000
      WD12  PHEN              2         2    1.00000        0.00       0.00       0.00       0.000
      WD12  PST               2         1    0.50000        0.02       0.04       0.00       0.028
      WD12  RB                0         .          .           .          .          .           .
      WD12  R226              0         .          .           .          .          .           .
      WD12  R228              0         .          .           .          .          .           .
      WD12  SB                0         .          .           .          .          .           .
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DESCRIPTIVE STATISTICS FOR WELLS SAMPLED DURING 1983 WATER YEAR
OCTOBER 1,1982 - SEPTEMBER 30,1983

LOC	LOC	CHEMICAL	NVALUES	NZERO	PERCENT	MEANVAL	MAXVAL	MINVAL	STDDEV
WD12	WD12	SC	0	.	.	.	.	.	.
	WD12	SCN	0	.	.	.	.	.	.
	WD12	SE	2	2	1	0.000	0.000	0.000	0.0000
	WD12	SIO2	2	0	0	2.800	5.200	0.400	3.3941
	WD12	SOLS	0	.	.	.	.	.	.
	WD12	SO4	2	0	0	150.000	160.000	140.000	14.1421
	WD12	SR	2	0	0	2.950	5.300	0.600	3.3234
	WD12	SUSS	0	.	.	.	.	.	.
	WD12	S2O3	0	.	.	.	.	.	.
	WD12	TALK	2	0	0	450.000	480.000	420.000	42.4264
	WD12	TCOLIF	2	2	1	0.000	0.000	0.000	0.0000
	WD12	TCOLIS	2	2	1	0.000	0.000	0.000	0.0000
	WD12	TDS	2	0	0	775.000	790.000	760.000	21.2132
	WD12	TH	0	.	.	.	.	.	.
	WD12	TI	0	.	.	.	.	.	.
	WD12	TOC	0	.	.	.	.	.	.
	WD12	TSSF	2	2	1	0.000	0.000	0.000	0.0000
	WD12	TURB	0	.	.	.	.	.	.
	WD12	U	0	.	.	.	.	.	.
	WD12	V	0	.	.	.	.	.	.
	WD12	W	0	.	.	.	.	.	.
	WD12	Y	0	.	.	.	.	.	.
	WD12	ZN	2	2	1	0.000	0.000	0.000	0.0000
	WD12	ZR	0	.	.	.	.	.	.

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                         DESCRIPTIVE STATISTICS FOR WELLS SAMPLED DURING 1983 WATER YEAR
                                   OCTOBER 1,1982 - SEPTEMBER 30,1983

LOC     LOC     CHEMICAL     NVALUES      NZERO      PERCENT       MEANVAL       MAXVAL       MINVAL       STDDEV

WD20    WD20    AG                 1          1      1.00000          0.00         0.00         0.00         .
        WD20    AL                 2          2      1.00000          0.00         0.00         0.00         0.000
        WD20    ALPHA              0          .      .                .            .            .            .
        WD20    AS                 2          2      1.00000          0.00         0.00         0.00         0.000
        WD20    B                  2          1      0.50000          0.20         0.40         0.00         0.283
        WD20    BA                 2          2      1.00000          0.00         0.00         0.00         0.000
        WD20    BE                 0          .      .                .            .            .            .
        WD20    BETA               0          .      .                .            .            .            .
        WD20    BOD                0          .      .                .            .            .            .
        WD20    BR                 2          1      0.50000          0.05         0.10         0.00         0.071
        WD20    CA                 2          0      0.00000          5.00         6.20         3.80         1.697
        WD20    CD                 0          .      .                .            .            .            .
        WD20    CH                 0          .      .                .            .            .            .
        WD20    CL                 2          0      0.00000         41.00        46.00        36.00         7.071
        WD20    CO                 0          .      .                .            .            .            .
        WD20    COD                2          2      1.00000          0.00         0.00         0.00         0.000
        WD20    CO3                2          1      0.50000         50.00       100.00         0.00        70.711
        WD20    CR                 2          2      1.00000          0.00         0.00         0.00         0.000
        WD20    CS                 0          .      .                .            .            .            .
        WD20    CU                 2          2      1.00000          0.00         0.00         0.00         0.000
        WD20    CYAN               0          .      .                .            .            .            .
        WD20    DATE               2          0      0.00000       8474.50      8566.00      8383.00       129.401
        WD20    DOC                2          0      0.00000         23.00        28.00        18.00         7.071
        WD20    F                  2          0      0.00000         13.35        24.00         2.70        15.061
        WD20    FCOLIF             0          .      .                .            .            .            .
        WD20    FE                 2          2      1.00000          0.00         0.00         0.00         0.000
        WD20    GA                 0          .      .                .            .            .            .
        WD20    GE                 0          .      .                .            .            .            .
        WD20    HARD               2          0      0.00000         95.50       120.00        71.00        34.648
        WD20    HCO3               2          0      0.00000        435.00       500.00       370.00        91.924
        WD20    HG                 2          2      1.00000          0.00         0.00         0.00         0.000
        WD20    I                  0          .      .                .            .            .            .
        WD20    K                  2          0      0.00000          3.30         3.40         3.20         0.141
        WD20    KJN                1          0      0.00000          0.90         0.90         0.90         .
        WD20    LAS                0          .      .                .            .            .            .
        WD20    LI                 2          0      0.00000          0.25         0.30         0.20         0.071
        WD20    MA                 0          .      .                .            .            .            .
        WD20    MG                 2          0      0.00000         19.50        24.00        15.00         6.364
        WD20    MN                 2          0      0.00000          0.02         0.03         0.02         0.007
        WD20    MOLY               2          0      0.00000          0.05         0.06         0.05         0.007
        WD20    NA                 2          0      0.00000        290.00       310.00       270.00        28.284
        WD20    NH3                2          0      0.00000          0.50         0.60         0.40         0.141
        WD20    NI                 0          .      .                .            .            .            .
        WD20    NO3                2          2      1.00000          0.00         0.00         0.00         0.000
        WD20    OH                 0          .      .                .            .            .            .
        WD20    OLGR               2          2      1.00000          0.00         0.00         0.00         0.000
        WD20    PA                 0          .      .                .            .            .            .
        WD20    PB                 2          0      0.00000          0.03         0.04         0.02         0.014
        WD20    PHEN               2          2      1.00000          0.00         0.00         0.00         0.000
        WD20    PST                2          1      0.50000          0.15         0.30         0.00         0.212
        WD20    RB                 0          .      .                .            .            .            .
        WD20    R226               0          .      .                .            .            .            .
        WD20    R228               0          .      .                .            .            .            .
        WD20    SB                 0          .      .                .            .            .            .
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DESCRIPTIVE STATISTICS FOR WELLS SAMPLED DURING 1983 WATER YEAR
OCTOBER 1,1982 - SEPTEMBER 30,1983

LOC	LOC	CHEMICAL	NVALUES	NZERO	PERCENT	MEANVAL	MAXVAL	MINVAL	STDDEV
WD20	WD20	SC	0	.	.	.	.	.	.
	WD20	SCN	0	.	.	.	.	.	.
	WD20	SE	2	2	1	0	0	0	0.000
	WD20	SIO2	2	2	1	0	0	0	0.000
	WD20	SOLS	0	.	.	.	.	.	.
	WD20	SO4	2	0	0	140	160	120	28.284
	WD20	SR	2	2	1	0	0	0	0.000
	WD20	SUSS	0	.	.	.	.	.	.
	WD20	S2O3	0	.	.	.	.	.	.
	WD20	TALK	2	0	0	485	600	370	162.635
	WD20	TCOLIF	2	2	1	0	0	0	0.000
	WD20	TCOLIS	2	2	1	0	0	0	0.000
	WD20	TDS	2	0	0	940	1100	780	226.274
	WD20	TH	0	.	.	.	.	.	.
	WD20	TI	0	.	.	.	.	.	.
	WD20	TOC	0	.	.	.	.	.	.
	WD20	TSSF	2	2	1	0	0	0	0.000
	WD20	TURB	0	.	.	.	.	.	.
	WD20	U	0	.	.	.	.	.	.
	WD20	V	0	.	.	.	.	.	.
	WD20	W	0	.	.	.	.	.	.
	WD20	Y	0	.	.	.	.	.	.
	WD20	ZN	2	2	1	0	0	0	0.000
	WD20	ZR	0	.	.	.	.	.	.

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                         DESCRIPTIVE STATISTICS FOR WELLS SAMPLED DURING 1983 WATER YEAR
                                      OCTOBER 1,1982 - SEPTEMBER 30,1983

LOC   LOC   CHEMICAL    NVALUES     NZERO    PERCENT     MEANVAL     MAXVAL     MINVAL     STDDEV

WD57  WD57  AG                0         .          .           .          .          .          .
      WD57  AL                2         2    1.00000        0.00       0.00       0.00      0.000
      WD57  ALPHA             0         .          .           .          .          .          .
      WD57  AS                2         2    1.00000        0.00       0.00       0.00      0.000
      WD57  B                 2         1    0.50000        0.20       0.40       0.00      0.283
      WD57  BA                2         2    1.00000        0.00       0.00       0.00      0.000
      WD57  BE                0         .          .           .          .          .          .
      WD57  BETA              0         .          .           .          .          .          .
      WD57  BOD               0         .          .           .          .          .          .
      WD57  BR                2         0    0.00000        0.65       0.80       0.50      0.212
      WD57  CA                2         0    0.00000       29.00      30.00      28.00      1.414
      WD57  CD                0         .          .           .          .          .          .
      WD57  CH                0         .          .           .          .          .          .
      WD57  CL                2         0    0.00000       19.00      22.00      16.00      4.243
      WD57  CO                0         .          .           .          .          .          .
      WD57  COD               2         2    1.00000        0.00       0.00       0.00      0.000
      WD57  CO3               2         1    0.50000       10.00      20.00       0.00     14.142
      WD57  CR                2         2    1.00000        0.00       0.00       0.00      0.000
      WD57  CS                0         .          .           .          .          .          .
      WD57  CU                2         2    1.00000        0.00       0.00       0.00      0.000
      WD57  CYAN              0         .          .           .          .          .          .
      WD57  DATE              2         0    0.00000     8467.00    8566.00    8368.00    140.007
      WD57  DOC               2         1    0.50000        2.50       5.00       0.00      3.536
      WD57  F                 2         0    0.00000        0.70       1.00       0.40      0.424
      WD57  FCOLIF            0         .          .           .          .          .          .
      WD57  FE                2         0    0.00000        0.04       0.06       0.02      0.028
      WD57  GA                0         .          .           .          .          .          .
      WD57  GE                0         .          .           .          .          .          .
      WD57  HARD              2         0    0.00000      265.00     270.00     260.00      7.071
      WD57  HCO3              2         0    0.00000      400.00     400.00     400.00      0.000
      WD57  HG                2         2    1.00000        0.00       0.00       0.00      0.000
      WD57  I                 0         .          .           .          .          .          .
      WD57  K                 2         0    0.00000        2.10       2.20       2.00      0.141
      WD57  KJN               1         0    0.00000        0.20       0.20       0.20          .
      WD57  LAS               0         .          .           .          .          .          .
      WD57  LI                2         0    0.00000        0.07       0.08       0.07      0.007
      WD57  MA                0         .          .           .          .          .          .
      WD57  MG                2         0    0.00000       46.50      47.00      46.00      0.707
      WD57  MN                2         0    0.00000        0.02       0.02       0.02      0.000
      WD57  MOLY              2         0    0.00000        0.15       0.20       0.10      0.071
      WD57  NA                2         0    0.00000      155.00     170.00     140.00     21.213
      WD57  NH3               2         0    0.00000        0.30       0.40       0.20      0.141
      WD57  NI                0         .          .           .          .          .          .
      WD57  NO3               2         0    0.00000        1.30       2.00       0.60      0.990
      WD57  OH                0         .          .           .          .          .          .
      WD57  OLGR              2         2    1.00000        0.00       0.00       0.00      0.000
      WD57  PA                0         .          .           .          .          .          .
      WD57  PB                2         0    0.00000        0.04       0.06       0.02      0.028
      WD57  PHEN              2         2    1.00000        0.00       0.00       0.00      0.000
      WD57  PST               2         1    0.50000        0.28       0.56       0.00      0.396
      WD57  RB                0         .          .           .          .          .          .
      WD57  R226              0         .          .           .          .          .          .
      WD57  R228              0         .          .           .          .          .          .
      WD5-  SB                0         .          .           .          .          .          .
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DESCRIPTIVE STATISTICS FOR WELLS SAMPLED DURING 1983 WATER YEAR
OCTOBER 1,1982 - SEPTEMBER 30,1983

LOC	LOC	CHEMICAL	NVALUES	NZERO	PERCENT	MEANVAL	MAXVAL	MINVAL	STDDEV
WD57	WD57	SC	0	.	.	.	.	.	.
	WD57	SCN	0	.	.	.	.	.	.
	WD57	SE	2	2	1.00000	0.000	0.000	0.000	0.0000
	WD57	SIO2	2	0	0.00000	20.000	20.000	20.000	0.0000
	WD57	SOLS	0	.	.	.	.	.	.
	WD57	SO4	2	0	0.00000	180.000	190.000	170.000	14.1421
	WD57	SR	2	0	0.00000	4.800	8.700	0.900	5.5154
	WD57	SUSS	0	.	.	.	.	.	.
	WD57	S2O3	0	.	.	.	.	.	.
	WD57	TALK	2	0	0.00000	410.000	420.000	400.000	14.1421
	WD57	TCOLIF	2	2	1.00000	0.000	0.000	0.000	0.0000
	WD57	TCOLIS	2	2	1.00000	0.000	0.000	0.000	0.0000
	WD57	TDS	2	0	0.00000	785.000	800.000	770.000	21.2132
	WD57	TH	0	.	.	.	.	.	.
	WD57	TI	0	.	.	.	.	.	.
	WD57	TOC	0	.	.	.	.	.	.
	WD57	TSSF	2	2	1.00000	0.000	0.000	0.000	0.0000
	WD57	TURB	0	.	.	.	.	.	.
	WD57	U	0	.	.	.	.	.	.
	WD57	V	0	.	.	.	.	.	.
	WD57	W	0	.	.	.	.	.	.
	WD57	Y	0	.	.	.	.	.	.
	WD57	ZN	2	1	0.50000	0.015	0.030	0.000	0.0212
	WD57	ZR	0	.	.	.	.	.	.

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                         DESCRIPTIVE STATISTICS FOR WELLS SAMPLED DURING 1983 WATER YEAR
                                       OCTOBER 1,1982 - SEPTEMBER 30,1983

LOC    LOC    CHEMICAL      NVALUES      NZERO     PERCENT     MEANVAL     MAXVAL     MINVAL     STDDEV

WE20   WE20   AG                  0          .          .           .          .          .          .
       WE20   AL                  2          2    1.00000        0.00       0.00       0.00      0.000
       WE20   ALPHA               0          .          .           .          .          .          .
       WE20   AS                  2          2    1.00000        0.00       0.00       0.00      0.000
       WE20   B                   2          0    0.00000        1.95       2.00       1.90      0.071
       WE20   BA                  2          2    1.00000        0.00       0.00       0.00      0.000
       WE20   BE                  0          .          .           .          .          .          .
       WE20   BETA                0          .          .           .          .          .          .
       WE20   BOD                 0          .          .           .          .          .          .
       WE20   BR                  2          1    0.50000        0.05       0.10       0.00      0.071
       WE20   CA                  2          1    0.50000        0.35       0.70       0.00      0.495
       WE20   CD                  0          .          .           .          .          .          .
       WE20   CH                  0          .          .           .          .          .          .
       WE20   CL                  2          0    0.00000       86.50      96.00      77.00     13.435
       WE20   CO                  0          .          .           .          .          .          .
       WE20   COD                 2          2    1.00000        0.00       0.00       0.00      0.000
       WE20   CO3                 2          0    0.00000      125.00     200.00      50.00    106.066
       WE20   CR                  2          2    1.00000        0.00       0.00       0.00      0.000
       WE20   CS                  0          .          .           .          .          .          .
       WE20   CU                  2          2    1.00000        0.00       0.00       0.00      0.000
       WE20   CYAN                0          .          .           .          .          .          .
       WE20   DATE                2          0    0.00000     8468.00    8566.00    8370.00    138.593
       WE20   DOC                 2          1    0.50000        0.50       1.00       0.00      0.707
       WE20   F                   2          0    0.00000       31.50      37.00      26.00      7.778
       WE20   FCOLIF              0          .          .           .          .          .          .
       WE20   FE                  2          0    0.00000        0.06       0.10       0.03      0.049
       WE20   GA                  0          .          .           .          .          .          .
       WE20   GE                  0          .          .           .          .          .          .
       WE20   HARD                2          0    0.00000       12.00      13.00      11.00      1.414
       WE20   HCO3                2          0    0.00000     1250.00    1300.00    1200.00     70.711
       WE20   HG                  2          2    1.00000        0.00       0.00       0.00      0.000
       WE20   I                   0          .          .           .          .          .          .
       WE20   K                   2          0    0.00000        8.15       8.30       8.00      0.212
       WE20   KJN                 1          0    0.00000        1.50       1.50       1.50          .
       WE20   LAS                 0          .          .           .          .          .          .
       WE20   LI                  2          0    0.00000        0.20       0.20       0.20      0.000
       WE20   MA                  0          .          .           .          .          .          .
       WE20   MG                  2          0    0.00000        2.70       3.20       2.20      0.707
       WE20   MN                  2          1    0.50000        0.01       0.02       0.00      0.014
       WE20   MOLY                2          0    0.00000        0.01       0.01       0.01      0.000
       WE20   NA                  2          0    0.00000      845.00    1000.00     690.00    219.203
       WE20   NH3                 2          0    0.00000        0.85       1.20       0.50      0.495
       WE20   NI                  0          .          .           .          .          .          .
       WE20   NO3                 2          2    1.00000        0.00       0.00       0.00      0.000
       WE20   OH                  0          .          .           .          .          .          .
       WE20   OLGR                2          2    1.00000        0.00       0.00       0.00      0.000
       WE20   PA                  0          .          .           .          .          .          .
       WE20   PB                  2          0    0.00000        0.08       0.08       0.08      0.000
       WE20   PHEN                2          2    1.00000        0.00       0.00       0.00      0.000
       WE20   PST                 2          1    0.50000        0.33       0.66       0.00      0.467
       WE20   RB                  0          .          .           .          .          .          .
       WE20   R226                0          .          .           .          .          .          .
       WE20   R228                0          .          .           .          .          .          .
       WE20   SB                  0          .          .           .          .          .          .
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                        DESCRIPTIVE STATISTICS FOR WELLS SAMPLED DURING 1983 WATER YEAR
                                    OCTOBER 1,I982 - SEPTEMBER 30,1983

LOC   LOC   CHEMICAL    NVALUES    NZERO    PERCENT    MEANVAL    MAXVAL    MINVAL    STDDEV

WE20  WE20  SC                0        .          .          .         .         .         .
      WE20  SCN               0        .          .          .         .         .         .
      WE20  SE                2        2    I.00000       0.00      0.00      0.00    0.0000
      WE20  SIO2              2        0    0.00000       2.00      2.50      1.50    0.7071
      WE20  SOLS              0        .          .          .         .         .         .
      WE20  SO4               2        0    0.00000      53.40    100.00      6.80   65.9024
      WE20  SR                2        1    0.50000       0.50      1.00      0.00    0.7071
      WE20  SUSS              0        .          .          .         .         .         .
      WE20  S2O3              0        .          .          .         .         .         .
      WE20  TALK              2        0    0.00000    1400.00   1400.00   1400.00    0.0000
      WE20  TCOLIF            2        2    I.00000       0.00      0.00      0.00    0.0000
      WE20  TCOLIS            2        2    1.00000       0.00      0.00      0.00    0.0000
      WE20  TDS               2        0    0.00000    1850.00   1900.00   1800.00   70.7107
      WE20  TH                0        .          .          .         .         .         .
      WE20  TI                0        .          .          .         .         .         .
      WE20  TOC               0        .          .          .         .         .         .
      WE20  TSSF              2        2    I.00000       0.00      0.00      0.00    0.0000
      WE20  TURB              0        .          .          .         .         .         .
      WE20  U                 0        .          .          .         .         .         .
      WE20  V                 0        .          .          .         .         .         .
      WE20  W                 0        .          .          .         .         .         .
      WE20  Y                 0        .          .          .         .         .         .
      WE20  ZN                2        2    I.00000       0.00      0.00      0.00    0.0000
      WE20  ZR                0        .          .          .         .         .         .
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                        DESCRIPTIVE STATISTICS FOR WELLS SAMPLED DURING 1983 WATER YEAR
                                   OCTOBER 1,1982 - SEPTEMBER 30,1983

LOC    LOC    CHEMICAL     NVALUES     NZERO    PERCENT    MEANVAL    MAXVAL    MINVAL     STDDEV

WG12   WG12   AG                 0         .       .          .          .         .          .
       WG12   AL                 2         2    1.00000       0.00       0.00      0.00       0.000
       WG12   ALPHA              0         .       .          .          .         .          .
       WG12   AS                 2         2    1.00000       0.00       0.00      0.00       0.000
       WG12   B                  2         0    0.00000       7.85       9.10      6.60       1.768
       WG12   BA                 2         1    0.50000       0.25       0.50      0.00       0.354
       WG12   BE                 0         .       .          .          .         .          .
       WG12   BETA               0         .       .          .          .         .          .
       WG12   BOD                0         .       .          .          .         .          .
       WG12   BR                 2         1    0.50000       1.90       3.80      0.00       2.687
       WG12   CA                 2         1    0.50000       0.55       1.10      0.00       0.778
       WG12   CD                 0         .       .          .          .         .          .
       WG12   CH                 0         .       .          .          .         .          .
       WG12   CL                 2         0    0.00000     170.00     180.00    160.00      14.142
       WG12   CO                 0         .       .          .          .         .          .
       WG12   COD                2         2    1.00000       0.00       0.00      0.00       0.000
       WG12   CO3                2         0    0.00000      60.00     100.00     20.00      56.569
       WG12   CR                 2         2    1.00000       0.00       0.00      0.00       0.000
       WG12   CS                 0         .       .          .          .         .          .
       WG12   CU                 2         1    0.50000       0.01       0.02      0.00       0.014
       WG12   CYAN               0         .       .          .          .         .          .
       WG12   DATE               2         0    0.00000    8466.50    8564.00   8369.00     137.886
       WG12   DOC                2         1    0.50000       0.50       1.00      0.00       0.707
       WG12   F                  2         0    0.00000      31.50      38.00     25.00       9.192
       WG12   FCOLIF             0         .       .          .          .         .          .
       WG12   FE                 2         0    0.00000       0.20       0.20      0.20       0.000
       WG12   GA                 0         .       .          .          .         .          .
       WG12   GE                 0         .       .          .          .         .          .
       WG12   HARD               2         0    0.00000      39.00      55.00     23.00      22.627
       WG12   HCO3               2         0    0.00000    2550.00    2600.00   2500.00      70.711
       WG12   HG                 2         2    1.00000       0.00       0.00      0.00       0.000
       WG12   I                  0         .       .          .          .         .          .
       WG12   K                  2         0    0.00000       9.35      10.00      8.70       0.919
       WG12   KJN                1         0    0.00000       3.90       3.90      3.90        .
       WG12   LAS                0         .       .          .          .         .          .
       WG12   LI                 2         0    0.00000       0.60       0.60      0.60       0.000
       WG12   MA                 0         .       .          .          .         .          .
       WG12   MG                 2         0    0.00000       5.20       5.50      4.90       0.424
       WG12   MN                 2         2    1.00000       0.00       0.00      0.00       0.000
       WG12   MOLY               2         0    0.00000       0.06       0.07      0.05       0.014
       WG12   NA                 2         0    0.00000    1600.00    2000.00   1200.00     565.685
       WG12   NH3                2         0    0.00000       2.00       3.40      0.60       1.980
       WG12   NI                 0         .       .          .          .         .          .
       WG12   NO3                2         2    1.00000       0.00       0.00      0.00       0.000
       WG12   OH                 0         .       .          .          .         .          .
       WG12   OLGR               2         2    1.00000       0.00       0.00      0.00       0.000
       WG12   PA                 0         .       .          .          .         .          .
       WG12   PB                 2         0    0.00000       0.10       0.10      0.10       0.000
       WG12   PHEN               2         2    1.00000       0.00       0.00      0.00       0.000
       WG12   PST                2         2    1.00000       0.00       0.00      0.00       0.000
       WG12   RB                 0         .       .          .          .         .          .
       WG12   R226               0         .       .          .          .         .          .
       WG12   R228               0         .       .          .          .         .          .
       WG[illegible]   SB                 0         .       .          .          .         .          .
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DESCRIPTIVE STATISTICS FOR WELLS SAMPLED DURING 1983 WATER YEAR
OCTOBER 1,1982 - SEPTEMBER 30,1983

LOC	LOC	CHEMICAL	NVALUES	NZERO	PERCENT	MEANVAL	MAXVAL	MINVAL	STDDEV
WG12	WG12	SC	0	.	.	.	.	.	.
	WG12	SCN	0	.	.	.	.	.	.
	WG12	SE	2	2	1.00000	0.00	0.00	0.00	0.0000
	WG12	SIO2	2	0	0.00000	15.50	17.00	14.00	2.1213
	WG12	SOLS	0	.	.	.	.	.	.
	WG12	SO4	2	0	0.00000	62.90	120.00	5.80	80.7516
	WG12	SR	2	1	0.50000	0.25	0.50	0.00	0.3536
	WG12	SUSS	0	.	.	.	.	.	.
	WG12	S2O3	0	.	.	.	.	.	.
	WG12	TALK	2	0	0.00000	2650.00	2700.00	2600.00	70.7107
	WG12	TCOLIF	2	2	1.00000	0.00	0.00	0.00	0.0000
	WG12	TCOLIS	2	2	1.00000	0.00	0.00	0.00	0.0000
	WG12	TDS	2	0	0.00000	3200.00	3200.00	3200.00	0.0000
	WG12	TH	0	.	.	.	.	.	.
	WG12	TI	0	.	.	.	.	.	.
	WG12	TOC	0	.	.	.	.	.	.
	WG12	TSSF	2	2	1.00000	0.00	0.00	0.00	0.0000
	WG12	TURB	0	.	.	.	.	.	.
	WG12	U	0	.	.	.	.	.	.
	WG12	V	0	.	.	.	.	.	.
	WG12	W	0	.	.	.	.	.	.
	WG12	Y	0	.	.	.	.	.	.
	WG12	ZN	2	1	0.50000	0.01	0.02	0.00	0.0141
	WG12	ZR	0	.	.	.	.	.	.

DESCRIPTIVE STATISTICS FOR WELLS SAMPLED DURING 1983 WATER YEAR
OCTOBER 1,1982 - SEPTEMBER 30,1983

LOC	LOC	CHEMICAL	NVALUES	NZERO	PERCENT	MEANVAL	MAXVAL	MINVAL	STDDEV
WG20	WG20	AG	0	.	.	.	.	.	.
	WG20	AL	1	1	1	0.00	0.00	0.00	.
	WG20	ALPHA	0	.	.	.	.	.	.
	WG20	AS	1	1	1	0.00	0.00	0.00	.
	WG20	B	1	0	0	1.60	1.60	1.60	.
	WG20	BA	1	1	1	0.00	0.00	0.00	.
	WG20	BE	0	.	.	.	.	.	.
	WG20	BETA	0	.	.	.	.	.	.
	WG20	BOD	0	.	.	.	.	.	.
	WG20	BR	1	1	1	0.00	0.00	0.00	.
	WG20	CA	1	0	0	0.50	0.50	0.50	.
	WG20	CD	0	.	.	.	.	.	.
	WG20	CH	0	.	.	.	.	.	.
	WG20	CL	1	0	0	73.00	73.00	73.00	.
	WG20	CO	0	.	.	.	.	.	.
	WG20	COD	1	1	1	0.00	0.00	0.00	.
	WG20	CO3	1	0	0	300.00	300.00	300.00	.
	WG20	CR	1	1	1	0.00	0.00	0.00	.
	WG20	CS	0	.	.	.	.	.	.
	WG20	CU	1	1	1	0.00	0.00	0.00	.
	WG20	CYAN	0	.	.	.	.	.	.
	WG20	DATE	1	0	0	8566.00	8566.00	8566.00	.
	WG20	DOC	1	0	0	9.00	9.00	9.00	.
	WG20	F	1	0	0	22.00	22.00	22.00	.
	WG20	FCOLIF	0	.	.	.	.	.	.
	WG20	FE	1	0	0	0.10	0.10	0.10	.
	WG20	GA	0	.	.	.	.	.	.
	WG20	GE	0	.	.	.	.	.	.
	WG20	HARD	1	0	0	7.00	7.00	7.00	.
	WG20	HCO3	1	0	0	1100.00	1100.00	1100.00	.
	WG20	HG	1	1	1	0.00	0.00	0.00	.
	WG20	I	0	.	.	.	.	.	.
	WG20	K	1	0	0	7.10	7.10	7.10	.
	WG20	KJN	1	0	0	1.60	1.60	1.60	.
	WG20	LAS	0	.	.	.	.	.	.
	WG20	LI	1	0	0	0.20	0.20	0.20	.
	WG20	MA	0	.	.	.	.	.	.
	WG20	MG	1	0	0	1.40	1.40	1.40	.
	WG20	MN	1	1	1	0.00	0.00	0.00	.
	WG20	MOLY	1	0	0	0.03	0.03	0.03	.
	WG20	NA	1	0	0	670.00	670.00	670.00	.
	WG20	NH3	1	0	0	1.30	1.30	1.30	.
	WG20	NI	0	.	.	.	.	.	.
	WG20	NO3	1	1	1	0.00	0.00	0.00	.
	WG20	OH	0	.	.	.	.	.	.
	WG20	OLGR	1	1	1	0.00	0.00	0.00	.
	WG20	PA	0	.	.	.	.	.	.
	WG20	PB	1	0	0	0.09	0.09	0.09	.
	WG20	PHEN	1	1	1	0.00	0.00	0.00	.
	WG20	PST	1	1	1	0.00	0.00	0.00	.
	WG20	RB	0	.	.	.	.	.	.
	WG20	R226	0	.	.	.	.	.	.
	WG20	R228	0	.	.	.	.	.	.
	WG20	SB	0	.	.	.	.	.	.

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                        DESCRIPTIVE STATISTICS FOR WELLS SAMPLED DURING 1983 WATER YEAR
                                   OCTOBER 1,1982 - SEPTEMBER 30,1983

LOC   LOC   CHEMICAL    NVALUES      NZERO     PERCENT    MEANVAL     MAXVAL     MINVAL     STDDEV

WG20  WG20  SC             0           .          .          .           .          .          .
      WG20  SCN            0           .          .          .           .          .          .
      WG20  SE             1           1          1         0.00        0.00       0.00        .
      WG20  SIO2           1           0          0         1.20        1.20       1.20        .
      WG20  SOLS           0           .          .          .           .          .          .
      WG20  SO4            1           0          0        75.00       75.00      75.00        .
      WG20  SR             1           1          1         0.00        0.00       0.00        .
      WG20  SUSS           0           .          .          .           .          .          .
      WG20  S2O3           0           .          .          .           .          .          .
      WG20  TALK           1           0          0      1400.00     1400.00    1400.00        .
      WG20  TCOLIF         1           1          1         0.00        0.00       0.00        .
      WG20  TCOLIS         1           1          1         0.00        0.00       0.00        .
      WG20  TDS            1           0          0      1800.00     1800.00    1800.00        .
      WG20  TH             0           .          .          .           .          .          .
      WG20  TI             0           .          .          .           .          .          .
      WG20  TOC            0           .          .          .           .          .          .
      WG20  TSSF           1           1          1         0.00        0.00       0.00        .
      WG20  TURB           0           .          .          .           .          .          .
      WG20  U              0           .          .          .           .          .          .
      WG20  V              0           .          .          .           .          .          .
      WG20  W              0           .          .          .           .          .          .
      WG20  Y              0           .          .          .           .          .          .
      WG20  ZN             1           1          1         0.00        0.00       0.00        .
      WG20  ZR             0           .          .          .           .          .          .
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DESCRIPTIVE STATISTICS FOR WELLS SAMPLED DURING 1983 WATER YEAR
OCTOBER 1,1982 - SEPTEMBER 30,1983

LOC	LOC	CHEMICAL	NVALUES	NZERO	PERCENT	MEANVAL	MAXVAL	MINVAL	STDDEV
WX32	WX32	AG	0	.	.	.	.	.	.
	WX32	AL	2	2	1.00000	0.00	0.00	0.00	0.000
	WX32	ALPHA	0	.	.	.	.	.	.
	WX32	AS	2	2	1.00000	0.00	0.00	0.00	0.000
	WX32	B	2	0	0.00000	1.10	1.60	0.60	0.707
	WX32	BA	2	2	1.00000	0.00	0.00	0.00	0.000
	WX32	BE	0	.	.	.	.	.	.
	WX32	BETA	0	.	.	.	.	.	.
	WX32	BOD	0	.	.	.	.	.	.
	WX32	BR	2	1	0.50000	0.10	0.20	0.00	0.141
	WX32	CA	2	0	0.00000	6.75	6.80	6.70	0.071
	WX32	CD	0	.	.	.	.	.	.
	WX32	CH	0	.	.	.	.	.	.
	WX32	CL	2	0	0.00000	12.75	21.00	4.50	11.667
	WX32	CO	0	.	.	.	.	.	.
	WX32	COD	2	2	1.00000	0.00	0.00	0.00	0.000
	WX32	CO3	2	0	0.00000	15.00	20.00	10.00	7.071
	WX32	CR	2	2	1.00000	0.00	0.00	0.00	0.000
	WX32	CS	0	.	.	.	.	.	.
	WX32	CU	2	2	1.00000	0.00	0.00	0.00	0.000
	WX32	CYAN	0	.	.	.	.	.	.
	WX32	DATE	3	0	0.00000	8456.33	8574.00	8361.00	108.242
	WX32	DOC	2	2	1.00000	0.00	0.00	0.00	0.000
	WX32	F	2	0	0.00000	20.00	22.00	18.00	2.828
	WX32	FCOLIF	0	.	.	.	.	.	.
	WX32	FE	2	0	0.00000	0.04	0.07	0.02	0.035
	WX32	GA	0	.	.	.	.	.	.
	WX32	GE	0	.	.	.	.	.	.
	WX32	HARD	2	0	0.00000	30.00	41.00	19.00	15.556
	WX32	HCO3	2	0	0.00000	470.00	480.00	460.00	14.142
	WX32	HG	3	2	0.66667	0.00	0.00	0.00	0.000
	WX32	I	0	.	.	.	.	.	.
	WX32	K	2	0	0.00000	0.80	0.80	0.80	0.000
	WX32	KJN	1	0	0.00000	2.80	2.80	2.80	.
	WX32	LAS	0	.	.	.	.	.	.
	WX32	LI	2	2	1.00000	0.00	0.00	0.00	0.000
	WX32	MA	0	.	.	.	.	.	.
	WX32	MG	2	0	0.00000	3.25	6.00	0.50	3.889
	WX32	MN	2	0	0.00000	0.06	0.07	0.05	0.014
	WX32	MOLY	2	2	1.00000	0.00	0.00	0.00	0.000
	WX32	NA	2	0	0.00000	210.00	260.00	160.00	70.711
	WX32	NH3	2	0	0.00000	1.15	2.20	0.10	1.485
	WX32	NI	0	.	.	.	.	.	.
	WX32	NO3	2	2	1.00000	0.00	0.00	0.00	0.000
	WX32	OH	0	.	.	.	.	.	.
	WX32	OLGR	2	2	1.00000	0.00	0.00	0.00	0.000
	WX32	PA	0	.	.	.	.	.	.
	WX32	PB	2	0	0.00000	0.02	0.02	0.02	0.000
	WX32	PHEN	2	2	1.00000	0.00	0.00	0.00	0.000
	WX32	PST	2	1	0.50000	0.03	0.07	0.00	0.049
	WX32	RB	0	.	.	.	.	.	.
	WX32	R226	0	.	.	.	.	.	.
	WX32	R228	0	.	.	.	.	.	.
	WX32	SB	0	.	.	.	.	.	.

DESCRIPTIVE STATISTICS FOR WELLS SAMPLED DURING 1983 WATER YEAR
OCTOBER 1,1982 - SEPTEMBER 30,1983

LOC	LOC	CHEMICAL	NVALUES	NZERO	PERCENT	MEANVAL	MAXVAL	MINVAL	STDDEV
WX32	WX32	SC	0	.	.	.	.	.	.
	WX32	SCN	0	.	.	.	.	.	.
	WX32	SE	2	2	1.00000	0.000	0.000	0.000	0.0000
	WX32	SIO2	2	0	0.00000	6.350	12.000	0.700	7.9903
	WX32	SOLS	0	.	.	.	.	.	.
	WX32	SO4	2	1	0.50000	9.500	19.000	0.000	13.4350
	WX32	SR	2	1	0.50000	0.850	1.700	0.000	1.2021
	WX32	SUSS	0	.	.	.	.	.	.
	WX32	S2O3	0	.	.	.	.	.	.
	WX32	TALK	2	0	0.00000	485.000	500.000	470.000	21.2132
	WX32	TCOLIF	3	3	1.00000	0.000	0.000	0.000	0.0000
	WX32	TCOLIS	3	3	1.00000	0.000	0.000	0.000	0.0000
	WX32	TDS	2	0	0.00000	620.000	660.000	580.000	56.5685
	WX32	TH	0	.	.	.	.	.	.
	WX32	TI	0	.	.	.	.	.	.
	WX32	TOC	0	.	.	.	.	.	.
	WX32	TSSF	3	3	1.00000	0.000	0.000	0.000	0.0000
	WX32	TURB	0	.	.	.	.	.	.
	WX32	U	0	.	.	.	.	.	.
	WX32	V	0	.	.	.	.	.	.
	WX32	W	0	.	.	.	.	.	.
	WX32	Y	0	.	.	.	.	.	.
	WX32	ZN	2	2	1.00000	0.000	0.000	0.000	0.0000
	WX32	ZR	0	.	.	.	.	.	.

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                    DESCRIPTIVE STATISTICS FOR WELLS SAMPLED DURING 1983 WATER YEAR
                              OCTOBER 1,1982 - SEPTEMBER 30,1983

LOC    LOC    CHEMICAL     NVALUES       NZERO    PERCENT     MEANVAL     MAXVAL     MINVAL     STDDEV

WX44   WX44   AG                 3           3    1.00000        0.00       0.00       0.00      0.000
       WX44   AL                 5           5    1.00000        0.00       0.00       0.00      0.000
       WX44   ALPHA              0           .          .           .          .          .          .
       WX44   AS                 5           5    1.00000        0.00       0.00       0.00      0.000
       WX44   B                  5           3    0.60000        0.12       0.30       0.00      0.164
       WX44   BA                 5           5    1.00000        0.00       0.00       0.00      0.000
       WX44   BE                 0           .          .           .          .          .          .
       WX44   BETA               0           .          .           .          .          .          .
       WX44   BOD                0           .          .           .          .          .          .
       WX44   BR                 5           1    0.20000        0.42       0.90       0.00      0.349
       WX44   CA                 5           0    0.00000       35.00      53.00       6.00     18.371
       WX44   CD                 0           .          .           .          .          .          .
       WX44   CH                 0           .          .           .          .          .          .
       WX44   CL                 5           0    0.00000       14.00      26.00       1.00      9.407
       WX44   CO                 0           .          .           .          .          .          .
       WX44   COD                5           5    1.00000        0.00       0.00       0.00      0.000
       WX44   CO3                5           2    0.40000       10.00      20.00       0.00     10.000
       WX44   CR                 5           5    1.00000        0.00       0.00       0.00      0.000
       WX44   CS                 0           .          .           .          .          .          .
       WX44   CU                 5           2    0.40000        0.03       0.10       0.00      0.041
       WX44   CYAN               0           .          .           .          .          .          .
       WX44   DATE               5           0    0.00000     8523.00    8644.00    8382.00    114.911
       WX44   DOC                5           1    0.20000       54.60     180.00       0.00     73.816
       WX44   F                  5           0    0.00000        5.44       6.60       4.20      1.106
       WX44   FCOLIF             0           .          .           .          .          .          .
       WX44   FE                 5           1    0.20000        0.49       1.70       0.00      0.704
       WX44   GA                 0           .          .           .          .          .          .
       WX44   GE                 0           .          .           .          .          .          .
       WX44   HARD               5           0    0.00000      316.00     380.00     250.00     53.198
       WX44   HCO3               5           0    0.00000      420.00     600.00     330.00    104.163
       WX44   HG                 5           5    1.00000        0.00       0.00       0.00      0.000
       WX44   I                  0           .          .           .          .          .          .
       WX44   K                  5           0    0.00000        1.58       3.00       0.20      1.217
       WX44   KJN                0           .          .           .          .          .          .
       WX44   LAS                0           .          .           .          .          .          .
       WX44   LI                 5           1    0.20000        0.04       0.05       0.00      0.022
       WX44   MA                 0           .          .           .          .          .          .
       WX44   MG                 5           0    0.00000       55.60      68.00      43.00     10.310
       WX44   MN                 5           1    0.20000        0.04       0.07       0.00      0.030
       WX44   MOLY               5           5    1.00000        0.00       0.00       0.00      0.000
       WX44   NA                 5           0    0.00000      242.00     280.00     230.00     21.679
       WX44   NH3                5           0    0.00000        0.68       1.20       0.20      0.383
       WX44   NI                 0           .          .           .          .          .          .
       WX44   NO3                5           4    0.80000        0.04       0.20       0.00      0.089
       WX44   OH                 0           .          .           .          .          .          .
       WX44   OLGR               5           3    0.60000       12.40      48.00       0.00     20.804
       WX44   PA                 0           .          .           .          .          .          .
       WX44   PB                 5           0    0.00000        0.03       0.04       0.02      0.009
       WX44   PHEN               5           4    0.80000        0.00       0.00       0.00      0.002
       WX44   PST                5           2    0.40000        0.01       0.03       0.00      0.013
       WX44   RB                 0           .          .           .          .          .          .
       WX44   R226               0           .          .           .          .          .          .
       WX44   R228               0           .          .           .          .          .          .
       WX44   SB                 0           .          .           .          .          .          .
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DESCRIPTIVE STATISTICS FOR WELLS SAMPLED DURING 1983 WATER YEAR
OCTOBER 1,1982 - SEPTEMBER 30,1983

LOC	LOC	CHEMICAL	NVALUES	NZERO	PERCENT	MEANVAL	MAXVAL	MINVAL	STDDEV
WX44	WX44	SC	0	.	.	.	.	.	.
	WX44	SCN	0	.	.	.	.	.	.
	WX44	SE	5	4	0.80000	0.040	0.20	0	0.089
	WX44	SIO2	5	1	0.20000	3.940	16.00	0	6.849
	WX44	SOLS	0	.	.	.	.	.	.
	WX44	SO4	5	0	0.00000	212.000	300.00	120	67.602
	WX44	SR	5	0	0.00000	6.780	8.40	5	1.308
	WX44	SUSS	2	1	0.50000	8.500	17.00	0	12.021
	WX44	S2O3	0	.	.	.	.	.	.
	WX44	TALK	5	0	0.00000	430.000	610.00	350	103.199
	WX44	TCOLIF	5	5	1.00000	0.000	0.00	0	0.000
	WX44	TCOLIS	5	5	1.00000	0.000	0.00	0	0.000
	WX44	TDS	5	0	0.00000	866.000	1000.00	700	135.204
	WX44	TH	0	.	.	.	.	.	.
	WX44	TI	0	.	.	.	.	.	.
	WX44	TOC	0	.	.	.	.	.	.
	WX44	TSSF	5	5	1.00000	0.000	0.00	0	0.000
	WX44	TURB	0	.	.	.	.	.	.
	WX44	U	0	.	.	.	.	.	.
	WX44	V	0	.	.	.	.	.	.
	WX44	W	0	.	.	.	.	.	.
	WX44	Y	0	.	.	.	.	.	.
	WX44	ZN	5	4	0.80000	0.100	0.50	0	0.224
	WX44	ZR	0	.	.	.	.	.	.

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                     DESCRIPTIVE STATISTICS FOR WELLS SAMPLED DURING 1983 WATER YEAR
                                  OCTOBER 1,1982 - SEPTEMBER 30,1983

LOC   LOC   CHEMICAL      NVALUES      NZERO    PERCENT     MEANVAL     MAXVAL     MINVAL     STDDEV

WY45  WY45  AG                  2          2    1.00000        0.00       0.00       0.00      0.000
      WY45  AL                  4          4    1.00000        0.00       0.00       0.00      0.000
      WY45  ALPHA               0          .          .           .          .          .          .
      WY45  AS                  4          4    1.00000        0.00       0.00       0.00      0.000
      WY45  B                   4          0    0.00000        0.97       1.20       0.70      0.222
      WY45  BA                  4          1    0.25000        0.47       0.70       0.00      0.330
      WY45  BE                  0          .          .           .          .          .          .
      WY45  BETA                0          .          .           .          .          .          .
      WY45  BOD                 0          .          .           .          .          .          .
      WY45  BR                  4          1    0.25000        0.22       0.40       0.00      0.171
      WY45  CA                  4          0    0.00000        1.97       3.10       1.10      0.838
      WY45  CD                  0          .          .           .          .          .          .
      WY45  CH                  0          .          .           .          .          .          .
      WY45  CL                  4          0    0.00000       11.95      23.00       6.80      7.484
      WY45  CO                  0          .          .           .          .          .          .
      WY45  COD                 4          4    1.00000        0.00       0.00       0.00      0.000
      WY45  CO3                 4          1    0.25000       22.50      60.00       0.00     26.300
      WY45  CR                  4          4    1.00000        0.00       0.00       0.00      0.000
      WY45  CS                  0          .          .           .          .          .          .
      WY45  CU                  4          3    0.75000        0.00       0.02       0.00      0.010
      WY45  CYAN                0          .          .           .          .          .          .
      WY45  DATE                4          0    0.00000     8529.50    8644.00    8382.00    131.622
      WY45  DOC                 4          0    0.00000       99.00     220.00      38.00     83.754
      WY45  F                   4          0    0.00000       22.75      27.00      20.00      3.096
      WY45  FCOLIF              0          .          .           .          .          .          .
      WY45  FE                  4          0    0.00000        0.22       0.40       0.07      0.136
      WY45  GA                  0          .          .           .          .          .          .
      WY45  GE                  0          .          .           .          .          .          .
      WY45  HARD                4          0    0.00000       12.38      20.00       6.50      5.618
      WY45  HCO3                4          0    0.00000      640.00     650.00     630.00      8.165
      WY45  HG                  4          4    1.00000        0.00       0.00       0.00      0.000
      WY45  I                   0          .          .           .          .          .          .
      WY45  K                   4          0    0.00000        7.22      10.00       2.10      3.523
      WY45  KJN                 0          .          .           .          .          .          .
      WY45  LAS                 0          .          .           .          .          .          .
      WY45  LI                  4          4    1.00000        0.00       0.00       0.00      0.000
      WY45  MA                  0          .          .           .          .          .          .
      WY45  MG                  4          0    0.00000        1.80       3.00       0.90      0.876
      WY45  MN                  4          3    0.75000        0.05       0.20       0.00      0.100
      WY45  MOLY                4          4    1.00000        0.00       0.00       0.00      0.000
      WY45  NA                  4          0    0.00000      355.00     380.00     340.00     19.149
      WY45  NH3                 4          0    0.00000        0.95       1.30       0.60      0.289
      WY45  NI                  0          .          .           .          .          .          .
      WY45  NO3                 4          3    0.75000        0.05       0.20       0.00      0.100
      WY45  OH                  0          .          .           .          .          .          .
      WY45  OLGR                4          1    0.25000       24.75      57.00       0.00     23.670
      WY45  PA                  0          .          .           .          .          .          .
      WY45  PB                  4          0    0.00000        0.04       0.06       0.03      0.013
      WY45  PHEN                4          3    0.75000        0.00       0.01       0.00      0.004
      WY45  PST                 3          3    1.00000        0.00       0.00       0.00      0.000
      WY45  RB                  0          .          .           .          .          .          .
      WY45  R226                0          .          .           .          .          .          .
      WY45  R228                0          .          .           .          .          .          .
      WY45  SB                  0          .          .           .          .          .          .
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DESCRIPTIVE STATISTICS FOR WELLS SAMPLED DURING 1983 WATER YEAR
OCTOBER 1,1982 - SEPTEMBER 30,1983

LOC	LOC	CHEMICAL	NVALUES	NZERO	PERCENT	MEANVAL	MAXVAL	MINVAL	STDDEV
WY45	WY45	SC	0	.	.	.	.	.	.
	WY45	SCN	0	.	.	.	.	.	.
	WY45	SE	4	3	0.75000	0.025	0.100	0.000	0.0500
	WY45	SIO2	4	0	0.00000	3.425	12.000	0.300	5.7291
	WY45	SOLS	0	.	.	.	.	.	.
	WY45	SO4	4	1	0.25000	8.250	15.000	0.000	6.9940
	WY45	SR	4	1	0.25000	0.625	1.200	0.000	0.4924
	WY45	SUSS	1	1	1.00000	0.000	0.000	0.000	.
	WY45	S2O3	0	.	.	.	.	.	.
	WY45	TALK	4	0	0.00000	662.500	700.000	640.000	26.2996
	WY45	TCOLIF	4	4	1.00000	0.000	0.000	0.000	0.0000
	WY45	TCOLIS	4	4	1.00000	0.000	0.000	0.000	0.0000
	WY45	TDS	4	0	0.00000	867.500	950.000	780.000	89.9537
	WY45	TH	0	.	.	.	.	.	.
	WY45	TI	0	.	.	.	.	.	.
	WY45	TOC	0	.	.	.	.	.	.
	WY45	TSSF	4	4	1.00000	0.000	0.000	0.000	0.0000
	WY45	TURB	0	.	.	.	.	.	.
	WY45	U	0	.	.	.	.	.	.
	WY45	V	0	.	.	.	.	.	.
	WY45	W	0	.	.	.	.	.	.
	WY45	Y	0	.	.	.	.	.	.
	WY45	ZN	4	2	0.50000	0.027	0.090	0.000	0.0427
	WY45	ZR	0	.	.	.	.	.	.

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                          DESCRIPTIVE STATISTICS FOR WELLS SAMPLED DURING 1983 WATER YEAR
                                   OCTOBER 1,1982 - SEPTEMBER 30,1983

LOC    LOC    CHEMICAL      NVALUES     NZERO     PERCENT     MEANVAL     MAXVAL     MINVAL     STDDEV

WY81   WY81   AG                  0         .           .           .          .          .          .
       WY81   AL                  1         1           1        0.00       0.00       0.00          .
       WY81   ALPHA               0         .           .           .          .          .          .
       WY81   AS                  1         1           1        0.00       0.00       0.00          .
       WY81   B                   1         0           0        1.60       1.60       1.60          .
       WY81   BA                  1         1           1        0.00       0.00       0.00          .
       WY81   BE                  0         .           .           .          .          .          .
       WY81   BETA                0         .           .           .          .          .          .
       WY81   BOD                 0         .           .           .          .          .          .
       WY81   BR                  1         1           1        0.00       0.00       0.00          .
       WY81   CA                  1         0           0        2.90       2.90       2.90          .
       WY81   CD                  0         .           .           .          .          .          .
       WY81   CH                  0         .           .           .          .          .          .
       WY81   CL                  1         0           0        8.00       8.00       8.00          .
       WY81   CO                  0         .           .           .          .          .          .
       WY81   COD                 1         1           1        0.00       0.00       0.00          .
       WY81   CO3                 1         1           1        0.00       0.00       0.00          .
       WY81   CR                  1         1           1        0.00       0.00       0.00          .
       WY81   CS                  0         .           .           .          .          .          .
       WY81   CU                  1         1           1        0.00       0.00       0.00          .
       WY81   CYAN                0         .           .           .          .          .          .
       WY81   DATE                1         0           0     8586.00    8586.00    8586.00          .
       WY81   DOC                 1         0           0        4.00       4.00       4.00          .
       WY81   F                   1         0           0       22.00      22.00      22.00          .
       WY81   FCOLIF              0         .           .           .          .          .          .
       WY81   FE                  1         0           0        0.07       0.07       0.07          .
       WY81   GA                  0         .           .           .          .          .          .
       WY81   GE                  0         .           .           .          .          .          .
       WY81   HARD                1         0           0       18.00      18.00      18.00          .
       WY81   HCO3                1         0           0      980.00     980.00     980.00          .
       WY81   HG                  1         1           1        0.00       0.00       0.00          .
       WY81   I                   0         .           .           .          .          .          .
       WY81   K                   1         0           0        2.40       2.40       2.40          .
       WY81   KJN                 1         0           0       10.40      10.40      10.40          .
       WY81   LAS                 0         .           .           .          .          .          .
       WY81   LI                  1         0           0        0.06       0.06       0.06          .
       WY81   MA                  0         .           .           .          .          .          .
       WY81   MG                  1         0           0        2.70       2.70       2.70          .
       WY81   MN                  1         1           1        0.00       0.00       0.00          .
       WY81   MOLY                1         0           0        0.02       0.02       0.02          .
       WY81   NA                  1         0           0      500.00     500.00     500.00          .
       WY81   NH3                 1         0           0        9.50       9.50       9.50          .
       WY81   NI                  0         .           .           .          .          .          .
       WY81   NO3                 1         1           1        0.00       0.00       0.00          .
       WY81   OH                  0         .           .           .          .          .          .
       WY81   OLGR                1         1           1        0.00       0.00       0.00          .
       WY81   PA                  0         .           .           .          .          .          .
       WY81   PB                  1         0           0        0.04       0.04       0.04          .
       WY81   PHEN                1         1           1        0.00       0.00       0.00          .
       WY81   PST                 1         1           1        0.00       0.00       0.00          .
       WY81   RB                  0         .           .           .          .          .          .
       WY81   R226                0         .           .           .          .          .          .
       WY81   R228                0         .           .           .          .          .          .
       WY81   SB                  0         .           .           .          .          .          .
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DESCRIPTIVE STATISTICS FOR WELLS SAMPLED DURING 1983 WATER YEAR
OCTOBER 1,1982 - SEPTEMBER 30,1983

LOC	LOC	CHEMICAL	NVALUES	NZERO	PERCENT	MEANVAL	MAXVAL	MINVAL	STDDEV
WY81	WY81	SC	0	.	.	.	.	.	.
	WY81	SCN	0	.	.	.	.	.	.
	WY81	SE	1	1	1	0.00	0.00	0.00	.
	WY81	SIO2	1	0	0	4.60	4.60	4.60	.
	WY81	SOLS	0	.	.	.	.	.	.
	WY81	SO4	1	0	0	84.00	84.00	84.00	.
	WY81	SR	1	0	0	1.70	1.70	1.70	.
	WY81	SUSS	1	0	0	15.00	15.00	15.00	.
	WY81	S2O3	0	.	.	.	.	.	.
	WY81	TALK	1	0	0	980.00	980.00	980.00	.
	WY81	TCOLIF	1	1	1	0.00	0.00	0.00	.
	WY81	TCOLIS	1	1	1	0.00	0.00	0.00	.
	WY81	TDS	1	0	0	1400.00	1400.00	1400.00	.
	WY81	TH	0	.	.	.	.	.	.
	WY81	TI	0	.	.	.	.	.	.
	WY81	TOC	0	.	.	.	.	.	.
	WY81	TSSF	1	1	1	0.00	0.00	0.00	.
	WY81	TURB	0	.	.	.	.	.	.
	WY81	U	0	.	.	.	.	.	.
	WY81	V	0	.	.	.	.	.	.
	WY81	W	0	.	.	.	.	.	.
	WY81	Y	0	.	.	.	.	.	.
	WY81	ZN	1	1	1	0.00	0.00	0.00	.
	WY81	ZR	0	.	.	.	.	.	.

SPECIAL REPORTS

1.2.5 Special Reports

Geohydrology reports are presented in this section of activities conducted on-site during the spring and fall of 1983.

Progress in Installation of a Ground Water Monitoring System in the Vicinity of Spring 102, Piceance Creek Valley, Rio Blanco County, Colorado. I-591

Interpretations and Conclusions from Downhole Temperature Logs of Selected Wells Tract C-b, Piceance Basin, Colorado. I-611

GSi

GEOTHERMAL
SURVEYS, INC.

PROGRESS IN INSTALLATION OF A GROUND WATER MONITORING SYSTEM IN THE VICINITY OF SPRING 102, PICEANCE CREEK VALLEY RIO BLANCO COUNTY, COLORADO

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31 May 1983

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INTRODUCTION

This report is to describe progress in the installation of ground water monitoring facilities in the vicinity of Spring 102. This spring is located north of the Cb Tract along the southern margin of Piceance Creek Valley, Rio Blanco County, Colorado.

The purpose of the monitoring system is to study in detail the geohydrologic setting of the spring, to provide further information relative to ground water models in the area of the Cb Tract. One important question concerns the hydraulic relationship of alluvium and bedrock in the valley of Piceance Creek.

The installation was done by employees of Cathedral Bluffs Shale Oil Company. The installation was under the direction of Mr. Nick Stellavato and Mr. Gary Ullinskey, in on-site consultation with Geothermal Surveys, Inc. and Mr. Tom Major of the U.S. Geological Survey. Drilling began on April 19, 1983 and terminated on April 25, 1983, due to rising levels in Piceance Creek that threatened to flood the valley. The monitoring system was originally scheduled to consist of four wells; three in the alluvium and one bedrock monitor (Figure 1). To date, one well, (A102-1) is finished; and one well, (A102-2) is partially completed. At two sites, drilling operations could not be completed (A102-3 and bedrock monitor B102-1) due to the high water.

ACKNOWLEDGEMENT

Special thanks are due to Mr. Gary Ullinskey for coordinating the different individual groups involved.

SETTING

Spring 102 is along the southern margin of Piceance Creek Valley, approximately 1 1/4 miles north of the northern Cb Tract boundary and about 1/2 mile east of Willow Creek (Figure 1). The spring is located at the bedrock-alluvial

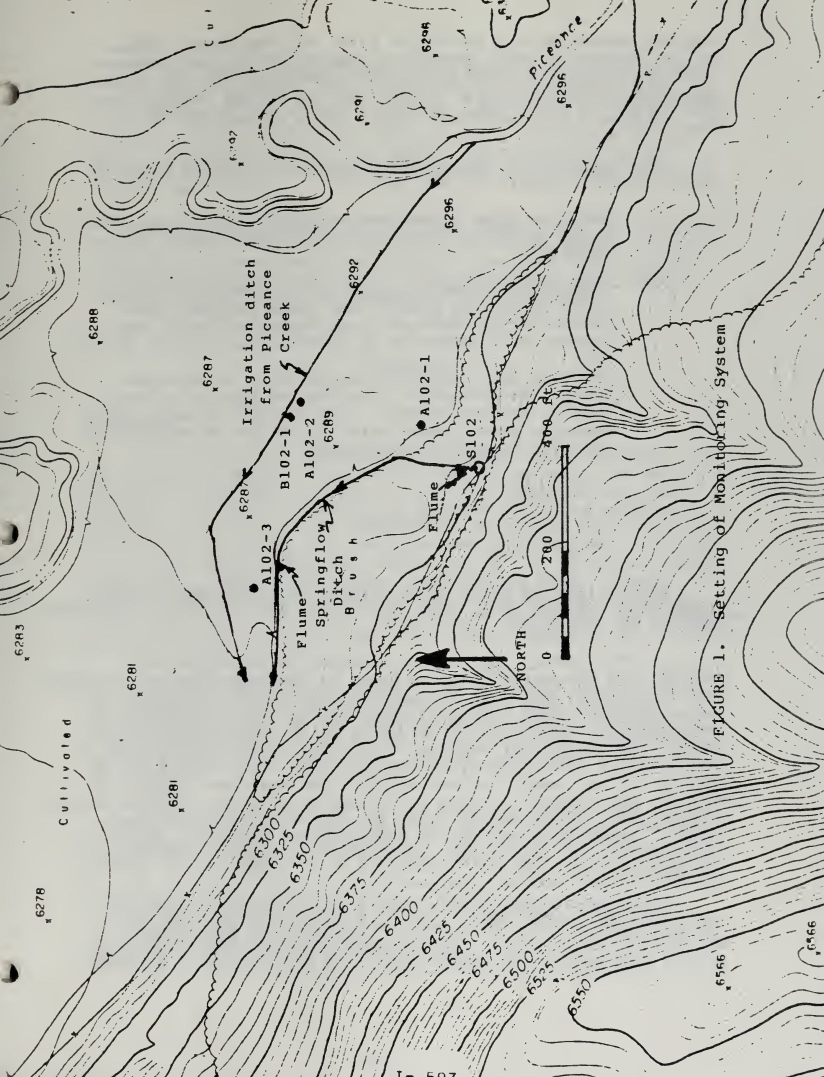

Irrigation ditch from Piceance Creek
B102-1
A102-2
A102-1
A102-3
S102
Flume
Flume
Springflow Ditch
Brush
Cultivated
Piceance
NORTH
0
200
400 ft
6278
6281
6281
6283
6287
6287
6288
6289
6292
6296
6296
6298
6300
6325
6350
6375
6400
6425
6450
6475
6500
6525
6550
6566
6566

FIGURE 1. Setting of Monitoring System

contact approximately where the Black Sulphur Creek Tongue of the Parachute Creek Formation passes beneath the Piceance Creek alluvium. Bedrock dips approximately 2° to the south. Detailed geologic mapping of the bedrock in the vicinity of the spring is to be done by others and is not presented here.

The location of the spring gives rise to three possible models as to recharge to the spring:

1. Recharge from deeper bedrock aquifers moving upward along presently undefined structure (faults or joints).
2. Recharge from shallow bedrock aquifers (confined Uinta Formation beneath the Black Sulphur Creek Tongue; or unconfined Uinta Formation above the tongue) with essentially lateral flow to the spring.
3. Recharge from the upstream alluvium of Piceance Creek. Near-surface clays may be providing some measure of confinement, with the spring being at a location where these clays pinch out or have been ruptured by geologic process.

METHODS

The monitoring wells were drilled by air rotary method. Lithologic samples were taken at 5 ft intervals and at significant changes in formation.

At each twenty feet depth interval, circulation was stopped and the water level allowed to approximately equilibriate. The water level was then measured to determine the change in potentiometric head with increased depth. Between these measurements, ground water produced by the well drilling was sampled by Geothermal Surveys, Inc., and tested on-site for pH, Specific Conductivity and Temperature. The flow rate of Spring 102 was monitored during drilling and test pumping to monitor any changes. These data were used to provide preliminary insight into which of the three ground water models is most likely, based on direction of ground water movement, degree of similarity in water chemistry, and interaction with spring production.

Wells were cased with 4 inch Schedule 40 line pipe with threaded couplings. The lower 10 ft had been perforated using a cutting torch. Perforations range in width from 1/8 to 1/4 inch and are 6 inches long in 4 rows around the casing.

Wells were intended to be completed with gravel to the top of the perforated zone, above which a bentonite seal would extend nearly to the surface. Caving of unconsolidated sands and clays, as noted below, modified this procedure. A 14-inch surface casing was cemented into an 18-inch depth, with a cover plate at 6 inch depth. This completion is intended to prevent damage to the monitoring installation by farming activities.

Wells were cleaned out and developed, first by injecting nearby creek or spring water down the casing with a portable, 2-horsepower pump down a 1 inch PVC pipe, and then surging to remove fine sand and silt. The wells were then pumped out for several hours to increase the development.

RESULTS

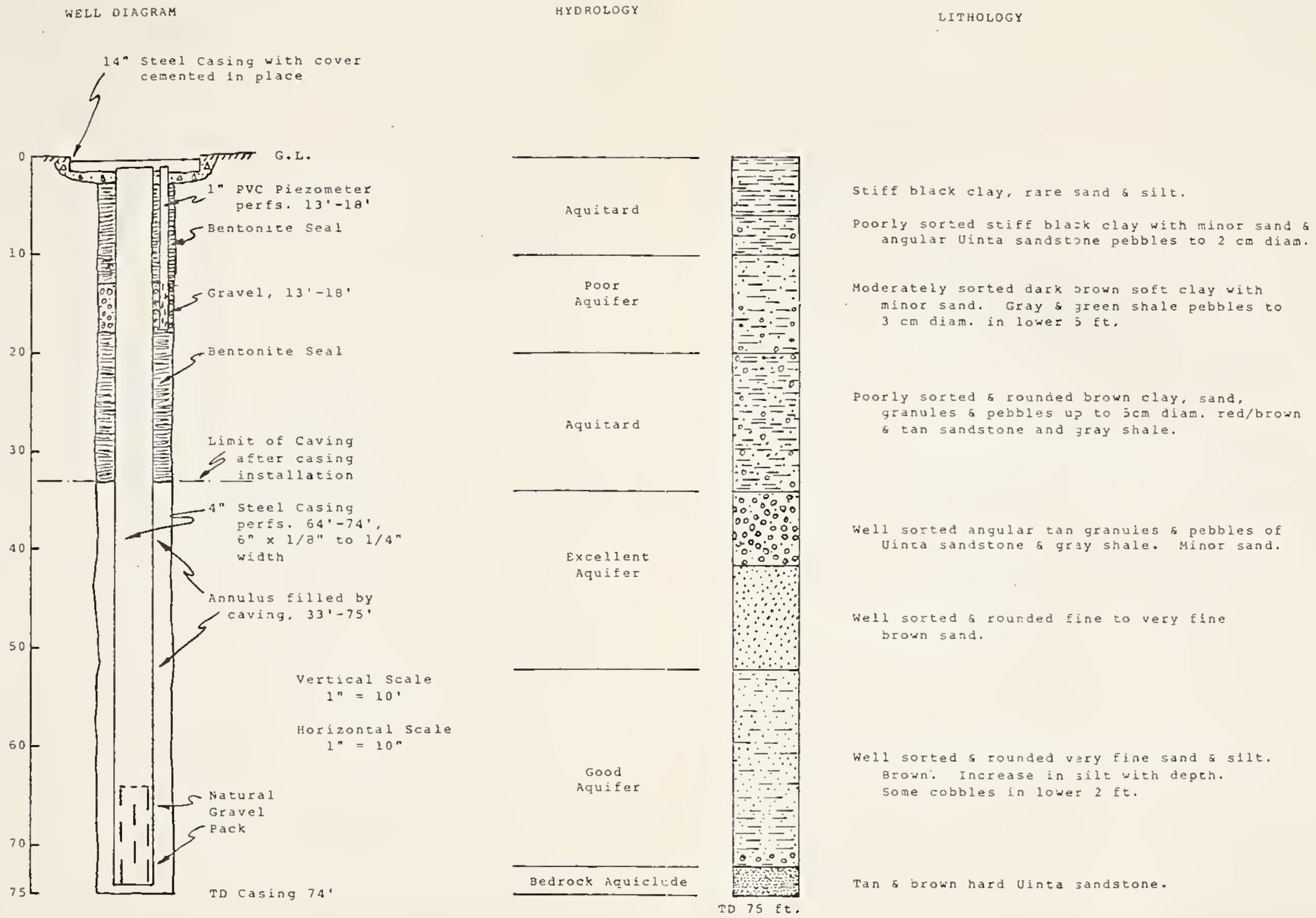
Well A102-1

Well A102-1 is located upstream and 120 ft southeast of Spring 102 (Figure 1). A diagram and lithologic log of the well are presented in Figure 2. In the upper 20 ft, the sediment is mostly clay and is expected to be an aquitard. Beneath this is a poorly sorted sand to pebble bed to 34 ft; this should function as a poor to moderate aquifer. From 34 ft to hard Uinta sandstone bedrock at 72 ft, is a 9-ft-thick pebble bed, underlain by fine, well sorted sand. These appear to be good to excellent aquifer materials. During drilling of this lowermost interval, water production increased from a few gpm to 30-40 gpm. After drilling, the well flowed at about 1 gpm or less.

A large amount of cuttings were produced from the hole, implying that caving was occurring. This was confirmed during emplacement of the casing, which had to be driven while rotating and circulating (i.e., drilled). The casing was only able to be set to 74 ft, one foot short of the 75 ft drilled.

After emplacement of the casing, the annulus had caved up to a 33 ft depth. This is just above the top of the sand that comprises the major aquifer. No gravel was able to be placed in the annulus. A bentonite seal was placed to 18 ft. It was noted throughout this time and the next day during 6 hours of pumping that the annulus continued to flow; but inside the casing, the water level ranged from a static depth of 2.1 ft to a pumping level of 16 ft, at a production of 20 gpm. To study this observation, a piezometer of 1 inch PVC tubing, with the lower 5 ft perforated with a common

FIGURE 2. WELL A102-1


WELL DIAGRAM
HYDROLOGY
LITHOLOGY
14" Steel Casing with cover cemented in place
G.L.
0
10
20
30
40
50
60
70
75
1" PVC Piezometer perfs. 13'-18'
Bentonite Seal
Gravel, 13'-18'
Bentonite Seal
Limit of Caving after casing installation
4" Steel Casing perfs. 64'-74', 6" x 1/8" to 1/4" width
Annulus filled by caving, 33'-75'
Vertical Scale 1" = 10'
Horizontal Scale 1" = 10"
Natural Gravel Pack
TD Casing 74'
Aquitard
Poor Aquifer
Aquitard
Excellent Aquifer
Good Aquifer
Bedrock Aquiclude
TD 75 ft.
Stiff black clay, rare sand & silt.
Poorly sorted stiff black clay with minor sand & angular Uinta sandstone pebbles to 2 cm diam.
Moderately sorted dark brown soft clay with minor sand. Gray & green shale pebbles to 3 cm diam. in lower 5 ft.
Poorly sorted & rounded brown clay, sand, granules & pebbles up to 5cm diam. red/brown & tan sandstone and gray shale.
Well sorted angular tan granules & pebbles of Uinta sandstone & gray shale. Minor sand.
Well sorted & rounded fine to very fine brown sand.
Well sorted & rounded very fine sand & silt. Brown. Increase in silt with depth. Some cobbles in lower 2 ft.
Tan & brown hard Uinta sandstone.

hacksaw, was placed in the annulus to the 18 ft depth. The annulus was backfilled with gravel to 13 ft and above this a bentonite seal to up to the bottom of the protective casing.

The well was cleaned and developed, after which the level in the piezometer was one foot above ground level and 2.1 ft below ground level in the casing.

Well A102-3

Upon completion of Well A102-1, it was decided next to drill A102-3; fewer equipment moves would thus be needed over the soft, wet pasture. Well site A102-3 is located downstream of Spring 102, 500 ft to the northwest (Figure 1).

Drilling at site A102-3, using the air rotary method, was not possible due to extreme caving of saturated, near surface clays. Upon reaching a 20 ft depth, caving to a radius of 10 ft had caused the drill rig to settle at the rear and the site was abandoned.

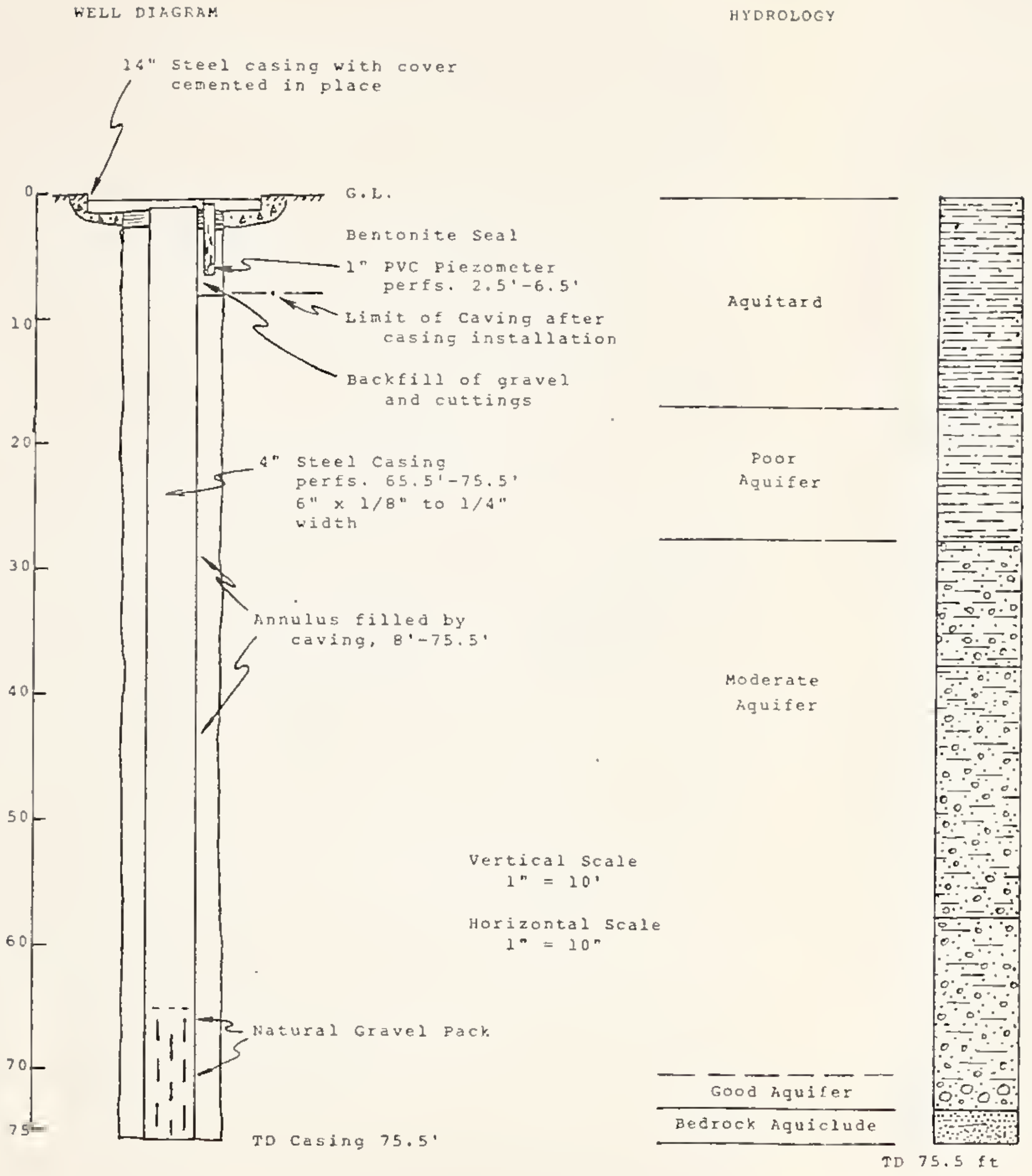
Well A102-2

Operations were moved to the site of Well A102-2. The site is 345 ft northeast of Spring 102 (Figure 1). It is nearly perpendicular to the strike of the valley from the spring, so it is neither upstream or downstream from it. It is located alongside an irrigation diversion from Piceance Creek that runs northwest to north through the pasture (Figure 1). A diagram and lithologic log of the well are presented in Figure 3. The lithologic log shows that the materials in the upper 17 ft are mostly clay and are expected to be an aquitard. Beneath this, from 17 to 28 ft, are softer clays with minor sand that should be poor aquifer material. From 28 to 70 ft, the sediments are generally poorly sorted and range from clay to cobbles which indicate a moderate aquifer.

Below this zone, from 70 to 73 ft, is a bed of cobbles and boulders with some minor clay. Most of this zone is likely to be a good aquifer. Beneath 73 ft is hard Unita sandstone bedrock.

In general, the log of Well A102-2 is similar to that of A102-1. An exception is that the clayey, poorly to moderately sorted aquifer zone, beneath 20 ft in depth is much thicker and appears to pinch out the clean sand aquifer present above the bedrock of Well A102-1. Water production during drilling ranged from 2 gpm to about 20 gpm. After drilling, the water level was about 4 ft beneath ground level.

FIGURE 3. WELL A102-2


WELL DIAGRAM
HYDROLOGY
LITHOLOGY
14" Steel casing with cover cemented in place
G.L.
Bentonite Seal
1" PVC Piezometer perfs. 2.5'-6.5'
Limit of Caving after casing installation
Backfill of gravel and cuttings
4" Steel Casing perfs. 65.5'-75.5' 6" x 1/8" to 1/4" width
Annulus filled by caving, 8'-75.5'
Natural Gravel Pack
TD Casing 75.5'
Vertical Scale 1" = 10'
Horizontal Scale 1" = 10"
0
10
20
30
40
50
60
70
75
Aquitard
Poor Aquifer
Moderate Aquifer
Good Aquifer
Bedrock Aquiclude
TD 75.5 ft

Stiff brown & dark brown clay with minor sand & silt.

Stiff dark brown clay.

Black clay with minor silt & sand.

Black soft clay.

Black clay with minor sand & granules of Uinta sandstone & gray shale. Sand & granule content increases in lower 5 ft.

Soft black clayey moderate to poorly sorted subrounded to subangular pebbles, granules & sand up to 5cm diam. of green, gray & dark brown shale and sandstone. Minor tan sandstone pebbles.

Soft black clayey poorly sorted subrounded pebbles, sand & cobbles up to 6cm diam. recovered of green & gray shale & siltstone. Drilling indicates larger boulders in lower 3 ft.

Tan & brown hard Uinta sandstone.

A large amount of cuttings were produced during drilling and the casing had to be driven similar to Well A102-1.

After emplacement of the casing, extensive caving occurred, causing the borehole to collapse up to within 8 ft of the surface, and to a radius of 10 ft around the well. Water level in the annular space was 4 ft and 6.6 ft inside the casing, so a piezometer was installed in the annulus similar to A102-1. Perforations are from 2.5 to 6.5 ft beneath ground level. Since it was not possible to place a bentonite seal in the annulus, monitoring of the piezometer and well levels may indicate whether the collapsed sediments have effectively sealed the annulus or if rehabilitation of the well is needed.

Well A102-2 was cleaned out and developed similar to Well A102-1.

Well B102-1)

The Bedrock Monitoring Well (B102-1) was not able to be drilled due to imminent flooding of the valley by Piceance Creek.

Hydrologic Data from Drilling

During the drilling program, borehole head, water quality, and spring flow measurements were obtained.

Table 1 presents the borehole head measurements taken during the drilling of Wells A102-1 and A102-2. They show that the aquifers in the perforated zone of the casing are under hydraulic head.

Levels taken during drilling down to these lower aquifer often show a lesser depth to water, which could indicate upward ground water flow potential as in the deep bedrock (Case 1 of the Introduction above) or alluvial (Case 3) recharge models. The levels taken after filling and sealing of the annulus to near the surface, and during pumping, directly contradict this. These levels show higher water levels in the near surface indicating downward flow potential.

One possible explanation is that because the near surface aquifers are much poorer and that more time was needed before equilibration occurred and true levels could be measured. Due to the caving and flooding problems, adequate equilibration time was not available to investigate this. It is our current opinion that the levels taken after completion and filling of the annulus are more reliable indicators of actual conditions in the area.

TABLE 1

Borehole Head Measurements

Depth, in feet	Depth to Water during drilling, in feet	
	Well A102-1	Well A102-2
20	8	8
40	8	7
60	0.8	11.8
75	3	9

Depth to Water after Completion and Development, in feet				
Time After Completion	Well A102-1	Companion Piezometer	Well A102-2	Companion Piezometer
1 day	2.1	Flowing approx. 1/2 gpm (piezometer not yet installed)	6.6	4
2 days	2.1	2.1	6.1	--

The levels taken after completion,show a greater depth to water inside the casings (which are only perforated just above bedrock) than in the annulus piezometers (which are only open to the upper aquifers). This indicates a downward ground water flow potential which would imply either a shallow bedrock (Case 2) or alluvial (Case 3) spring source.

Table 2 presents the results of water quality parameters measured on-site during drilling of Wells A102-1 and A102-2, as well as at Spring 102. They show that the quality of water produced from the wells during drilling is very similar to that of the spring. This implies either a shallow bedrock (Case 2) or alluvial (Case 3) spring source. A deep bedrock source (Case 1) cannot be eliminated, but is unlikely.

Table 3 presents the results of spring flow measurements during the drilling. It shows that water removed during the drilling and development operations did not affect the spring flow. This somewhat implies that bedrock (Case 1) or (Case 2) sources are more likely than the alluvial (Case 3) source. Production rates, however, may not have been great enough to produce any effect on the spring even if its recharge is derived from the alluvium. More vigorous and longer test pumping could eliminate this possibility.

The lithologic data from the drilling do not specifically support or deny any of the three ground water recharge models. The aquifer configuration (based on only two wells) does show a probable confining layer, apparently thinner and therefore probably more easily penetrated closer to the spring, which are necessary tenets for the alluvial recharge model (Case 3).

CONCLUSIONS

The conclusions presented below are tentative since the monitoring system is incomplete and may be altered in light of data from the completed system.

1. Case 1: Deep Bedrock Recharge

   Head measurements after completion and development of the wells and water quality measurements presently do not support the deep bedrock recharge model. Spring flow measurements could be consistent with either the deep bedrock model or other models.

   The deep bedrock recharge model appears least likely at this time.

TABLE 2

Water Quality Measurements

	During Drilling of A102-1			Spring 102		
epth in feet uring drilling	pH, pH units	Specific Conductivity, μmhos/cm	Temperature °C	pH, pH units	Specific Conductivity, μmhos/cm	Temperature °C
30	7.20	805	9.17			
50	7.21	932	9.19			
fter Completion	7.68	995	9.67			
	During Drilling of A102-2			7.44	1318	9.14
20	Sample too muddy					
40	7.65	1067	10.11			
60	7.94	982	10.61			

TABLE 3

Spring 102 Flow Measurements

Measurements made using 6" Standard Parshall Flume

Depth in feet	During Drilling of A102-1		
	Gage Reading	Free Flow (cfs)	Free Flow (gpm)
Day before drilling	0.52	0.73	328
0	0.52	0.73	328
20	0.52	0.73	328
50	0.51	0.71	319
After drilling	0.51	0.71	319
	During Drilling of A102-2		
	0.51	0.71	319

2. Case 2: Shallow Bedrock Recharge

   Head measurements after completion and development, water quality data, and spring flow measurements are all consistent with the shallow bedrock model, which appears most likely at this time.

3. Case 3: Alluvial Recharge Model

   Head measurements after completion and development do not support the alluvial recharge model, but water quality measurements do. Spring flow measurements do not add support to this model, but pumping may not have stressed the aquifers enough to support or deny the model. The lithologies of the wells show that valley alluvium appears to have the confining layers necessary for this model.

4. Lithologic data from the drilling are inconclusive in supporting or denying any of the ground water recharge models.

5. Head measurements taken during drilling appear unreliable because of the large differences in aquifer character between shallow and deeper alluvial aquifers.

RECOMMENDATIONS

1. The monitoring system should be completed. Bucket auger equipment should be considered for drilling through the alluvium, since oversize boreholes and consequent caving was a problem. Regular augers may be used, but could incur problems if large boulders, such as those present above the bedrock in Well Al02-2, are encountered. Lithology should be sampled as was done during the present installations.

2. Head measurements, water quality and spring flow should be monitored as during the present installations.

3. The drilling program should be scheduled, and casing should be on-site ahead of time, so that it can be installed immediately at the conclusion of drilling. This will minimize caving of the annulus and ensure the best possible seal of the upper annulus.

4. Well Al02-2 and the companion piezometer should be monitored during the summer to try to determine if the

annulus is sealed from the upper aquifers, or if additional work is needed to ensure that this well is a reliable monitor.

5. If upon completion of the system, none of the three models appears to be more valid than the others, vigorous long-term test pumping of the monitor wells should be considered, as it may support one model more than the other(s).

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INTERPRETATIONS AND CONCLUSIONS FROM DOWNHOLE TEMPERATURE LOGS OF SELECTED WELLS

TRACT C-B, PICEANCE BASIN, COLORADO

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1 September 1983

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INTERPRETATIONS AND CONCLUSIONS FROM DOWNHOLE TEMPERATURE LOGS OF SELECTED WELLS TRACT C-B, PICEANCE BASIN, COLORADO

INTRODUCTION

This report presents results and interpretations of the downhole temperature logging of selected wells on Tract C-b, Rio Blanco County, Colorado. Sixteen wells were logged by George Pavlov of Geothermal Surveys, Inc. between 20 and 26 July, 1983 for Cathedral Bluffs Shale Oil Co.

The objective of this investigation was to look for changes in the temperature profiles of the wells with time by superimposing the temperature profiles of the prior years. Marked changes were then interpreted in relation to Tract activity, well location and geohydrology.

DOWNHOLE TEMPERATURE LOGGING

The method applied in this investigation, downhole temperature logging, is based on the fact that a natural vertical temperature gradient in the Earth exists and results from the higher thermal potential in the Earth's interior to the lower thermal potential at the surface. However, this gradient can be modified by the presence of water and/or by flowing ground water, both by conduction and convection. The thermal diffusivity of water differs from that of air, and moving ground water exchanges heat with the surrounding materials, thus altering the temperature gradient. The source temperature of moving ground water is usually different from that of the geological formations through which it flows. It thus removes heat from or adds heat to the formation and changes the temperature gradient. The gradient will flatten, steepen, or even reverse, depending on the relationship between source temperature and the temperature of the formation through which the water flows.

The downhole temperature logging technique delineates areas where these processes are taking place. Specifically, the technique can locate zones with anomalous gradients and can aid in identification of aquifer location and control.

For example, zones with a low or reversed temperature gradient normally indicate active ground water movement. Zones with a high temperature gradient normally indicate little or no ground water movement. Vertical flow across strata is usually indicated by zero gradient.

Method

Each downhole temperature log was made by lowering a cable-mounted thermistor probe into the well-bore. The probe was allowed to reach thermal equilibrium and electrical resistance was recorded at predetermined depths. The resistance data were computer-reduced using coefficients of the individual calibration curve of the thermistor.

Interpretations of the results were made with reference to logs of the same wells measured in previous years. Abrupt changes in the gradient and with time were interpreted in relation to Tract activity, well location and geohydrology.

Data

The location of the logged wells is presented in Figure 1. The temperature profiles are presented in the Appendix.

Included on the temperature profiles are the location of the stratigraphic markers for each well. The markers for Wells 32X12 and 33X1 were determined from Beard (1983). The markers for Wells 14X7, 21X12, 22X17 and 24X17 were determined from existing well records provided by CBSO, and on file at GSI. The markers for the rest of the wells were determined from Beard (1981).

INTERPRETATION OF RESULTS

As mentioned earlier, the results are presented as temperature profiles in the Appendix. Following are our present interpretation of these results.

Well 32X12

Well 32X12 is located adjacent to the Service and Production (S/P) Shafts. The temperature profile exhibits vertical sections immediately below the base of the Uinta and immediately below the Four Senators. This is interpreted as upflow into the dewatered areas with the Four Senators acting as a strong barrier to upward flow. In addition, the excellent tracking suggests that a barrier exists between the Ventilation and Escape (V/E) Shaft and the S/P Shafts. This interpretation is also supported by the profile of Well 33X1, which is markedly different than Well 32X12.

Well 33X1

Well 33X1, located near the V/E Shaft, exhibits a strong cooling in the upper portion of the profile, with the change decreasing with depth. The strong change is interpreted as the effect of flooding the V/E Shaft beginning in September 1981. The fact that the strongest cooling is in the upper zone suggests that most of the ground water flow around the V/E Shaft occurs in the Uinta and more specifically, above the Black Sulfur Creek Tongue.

As in Well 32X12, the Four Senators acts as a strong barrier to flow as evidenced by the sharp increase in temperature through this zone.

Well 21X12

Well 21X12 is located between the V/E Shaft and the S/P Shafts. Note that a barrier to flow exists at about the 550 ft depth, just above the horizon identified as the Black Sulfur Tongue. Above the Black Sulfur Tongue, the profile resembles that of Well 33X1 and below the Black Sulfur Tongue, the profile resembles that of Well 32X12.

Well Cb-2

Well Cb-2, located east of the V/E Shaft on the north end of the tract, exhibits a profile similar to Well 33X1. The large cooling shift in the upper part of the profile with the effect decreasing with depth can again be attributed to flooding of the V/E Shaft.

The higher static water level along with the cooler temperature in the Uinta suggests local recharge near the surface to the Uinta.

Well Cb-3

A check of the data collected in Well Cb-3 indicates that the depth of readings may be off by about 20 ft. If this is correct, the displacement that is shown below 1100 ft would disappear and the profiles would track perfectly. This indicates that no change by dewatering or reflooding exists in this portion of the Tract.

Well SG-1

Well SG-1, located in the extreme northwest corner of the Tract, exhibits a slight cooling throughout its profile from 1982 to 1983. Although the shift is slight, the fact that the two curves track so well is significant.

We can interpret that there is no further effect in this part of the Tract by the flooding of the V/E Shaft or by the dewatering of the S/P Shaft, by comparing this profile to that of Wells 33X1 and 32X12.

The gradient in the Parachute Creek Formation is much shallower than the gradient in the Uinta Formation. This suggests that although water is present in the Parachute Creek Formation, it does not move as rapidly as the water in the Uinta.

Well SG-20

Well SG-20, located north of the Tract boundary, exhibits an interesting profile. At the 300 ft level there is no change over the three years of readings. However, changes do occur above and below this zone. This suggests aquiclude conditions at about the 300 ft level.

Comparison of this profile with Well Cb-2 indicates that Well SG-20 is warmer above the base of the Uinta and cooler below. This suggests that equivalent depth aquifers are quite different even in the relatively short distance between Wells SG-20 and Cb-2.

Well SG-19

Interpretation from Well SG-19, located north of the Tract boundary, are difficult due to the limited depth of available data. The SG-19 profiles are reasonably similar at the bottom to the equivalent depth in SG-20. Tight formation, suggested in SG-20, appears to be present also at SG-19.

The profile, above 200 ft, is cooler than that of SG-20, but appears to track with the profile below 200 ft.

Well SG-6

Well SG-6 exhibited a sharp drop in static water level from 1982 to 1983. Because of the excellent tracking of the temperature profiles, we interpret the drop in water level as due to depressurizing of the aquifer, not dewatering, by the dewatering of the S/P Shafts.

As in Well SG-1, the gradient difference above and below the base of the Uinta suggests that ground water flow in the Uinta is significantly larger than in the Parachute Creek Formation.

Also, the lack of response in the Four Senators and the A-Groove suggests that the aquifers in this part of the Tract are not yet activated by the production from the shafts.

Well AT-1D

Well AT-1D exhibits a profile similar to that of Well SG-6. SG-6. However, there are a few aspects of Well AT-1D which require additional interpretations.

The entire profile of Well AT-1D is cooler than that of Well SG-6. This is especially true in the Lower Uinta and suggests that the Lower Uinta is a stronger aquifer in the area of Well AT-1D than in Well SG-6. Also, aquifer activity exists below the Four Senators (~ 1150 ft), which does not appear in Well SG-6.

Well 14X7

Well 14X7 exhibits a profile similar to Wells SG-6 and AT-1D. However, it appears that activity in the Black Sulfur Tongue decreased after 1980. This suggests that the Black Sulfur Tongue unit is isolated from depth since the gradient changed sharply below 700 ft. This is supported in the profile of Well 21X12, the gradient also changed sharply below the interpreted base of the unit.

We cannot make this a definitive statement, as since there were no readings in Wells SG-6 and AT-1D in 1980, and there are no data for the Parachute Creek Formation in Well 14X7.

Well SG-9

Well SG-9, located in the southwest portion of the Tract, exhibits excellent tracking except at great depth. However, the 1981 data are suspect based on our field notes. This tracking, along with the profile of Well SG-1, suggests no change in aquifer activity in the western part of the Tract.

Well SG-10A

Well SG-10A exhibits very strong action in the Four Senators and A-Groove after 1981. Due to the proximity of the reinjection well, this action is probably in response to the reinjection test performed in 1981.

The profile is similar to that of Well AT1D, but with no action in the Black Sulfur Creek Tongue.

Well SG-11

The profile of Well SG-11 contains two highly anomalous trends which are very difficult to interpret or explain. If the data from 1981 are reliable, there has been a major change in the thermal characteristics of this well. Also, the major departure from the trend of the 1982 profile below the Four Senators is puzzling.

The drastic change in the profile of the well may be the result of cross-flow of warmer underlying water migrating upward in response to change in pressure in the overlying aquifers. A change due to the reinjection test is not likely due to declining static water level from 1981 to 1983, and the fact that Well SG-11 showed a rise of only 10 ft after 90 days of reinjection, after correcting for shaft dewatering (GSI, 1981).

Well 22X17

Well 22X17, located in the southeastern part of the Tract, exhibits a similar profile to Wells AT-1D, 14X7 and SG-9 above the Four Senators. However, below the Four Senators, major changes between 1982 and 1983 are observed.

Ground water between the Four Senators and the A-Groove may have flowed in response to reinjection and the changes seen in the profile, may represent a gradual return to normal conditions. If this interpretation can be confirmed with additional data, ground water in the Parachute Creek Formation occurs in relative permeable zones, but does not flow under natural conditions. In other words, it flows only under induced gradients such as pumping or injection.

Well 24X17

Well 24X17 exhibits a profile very similar to Well 22X17. Since Well 24X17 is located in the same general area of the Tract, the interpretation of this profile is similar to that of Well 22X17.

CONCLUSIONS

Several conclusions can be drawn from the interpretation of the temperature profiles. These conclusions should not be treated as a complete and final understanding of the complex geohydrology of Tract C-b, but as information which will be supplemented in the future. These conclusions are:

1. A barrier to flow exists between the V/E Shaft and the S/P Shafts. This conclusion is drawn from the difference in profiles of Wells 33X1 and 32X12.

2. The Four Senators act as a barrier to upward flow. This conclusion is drawn from the profiles in Wells 32X12, 33X1, SG10A, SG11, 22X17 and 24X17.

3. The Uinta Formation is a better aquifer than the underlying Parachute Creek Formation except for specific horizons -- such as the A-Groove -- within the Parachute Creek Formation. This conclusion is drawn from Wells 33X1, Cb-2 and SG-1.

4. There has been no significant effect in the northeast, northwest and southwest portions of the Tract by the dewatering of the S/P Shafts and the reflooding of the V/E Shaft. This conclusion is drawn from Wells Cb-3, SG-1, SG-6 and SG-9.

5. There has been a depressurizing effect southeast of the S/P Shafts due to detweatering of the shafts. This conclusion is drawn from Wells SG-6, AT-1D, SG10A, 14X7, SG-11, 22X17 and 24X17.

6. The Black Sulfur Tongue, or closely adjacent formation, acts as an aquifer and appears to be isolated from depth. This conclusion is drawn from Wells 21X12 and 14X7, and appears to support the conclusions reached recently by Beard.

7. The effect of the 1981 reinjection test is evident in the southeastern part of the Tract. Conditions appear to be returning to pre-test conditions as evidenced by the warming trend in an aquifer between the Four Senators and A-Groove. This conclusion is drawn from Wells 22X17 and 24X17.

8. Lateral changes in equivalent aquifers are evident in many of the profiles. Quantitative descriptions of the anisotrophy of the aquifers has been described and investigated by many authors.

RECOMMENDATIONS

Based on the findings of this study, which are drawn from downhole temperature logs of sixteen wells on Tract C-b and interpretation of the results in relation to Tract activity, well location and geohydrology, the following recommendations are made:

1. Downhole temperature logging should be performed in the six new coreholes now being drilled. These results, along with a continued program of logging the present wells would be used to extend and improve the interpretations and conclusions contained in this report.

2. These interpretations and conclusions should be incorporated into the developing model of the geohydrology and hydrogeology of Tract C-b.

REFERENCES

Beard, T.N., 1981. Geologic Framework, Tract C-b Area, Rio Blanco County, Colorado. Unpublished Report.

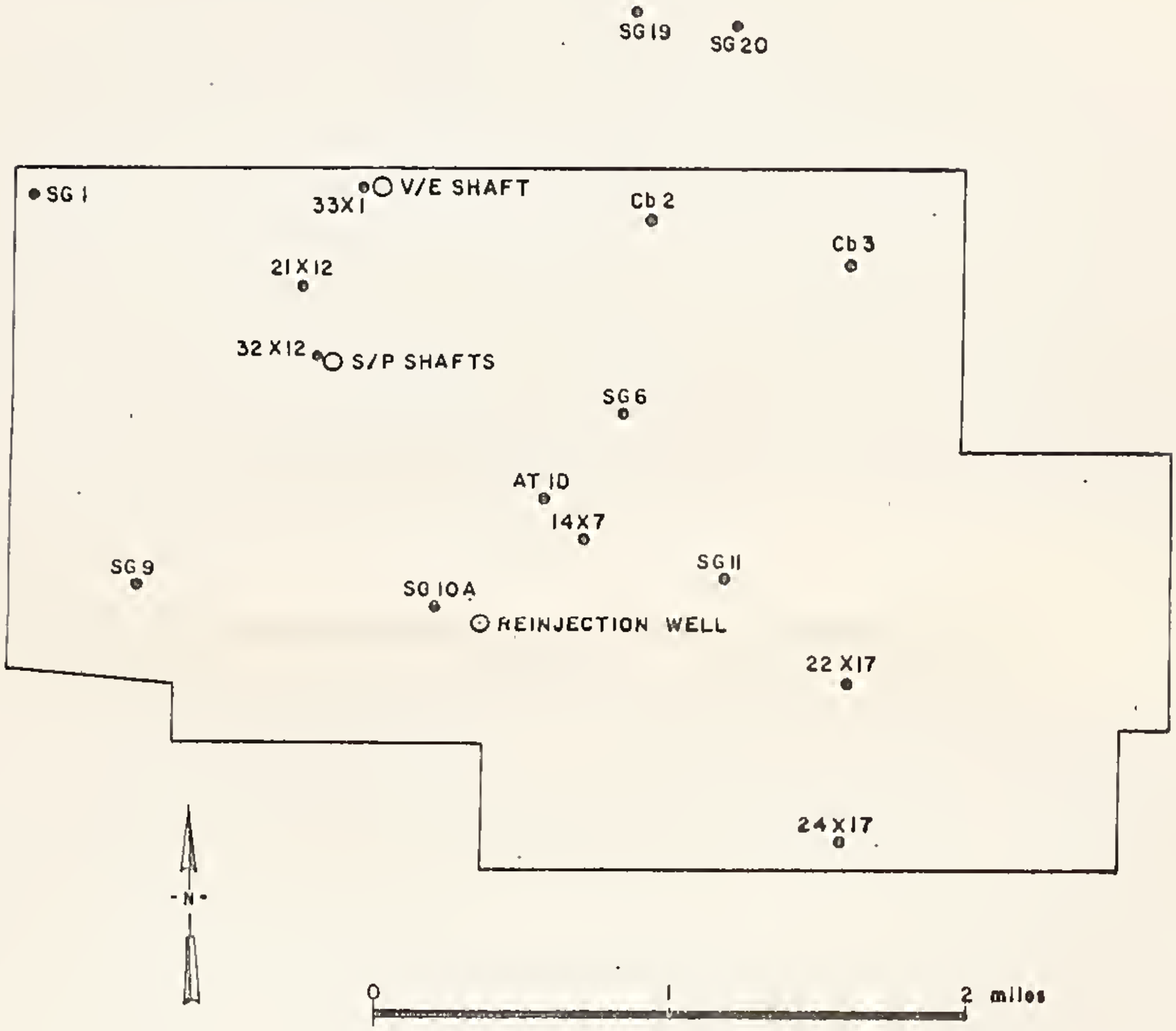
Beard, T.N., 1983. Geohydrology of the Black Sulphur and Tg_2 Tongues of the Green River Formation, Tract C-b Area, Piceance Basin, Colorado. Unpublished Report.

Geothermal Surveys, Inc., 1981. Geohydrologic Study of Reinjection, C-b Tract, Piceance Basin, Colorado. Unpublished Report.

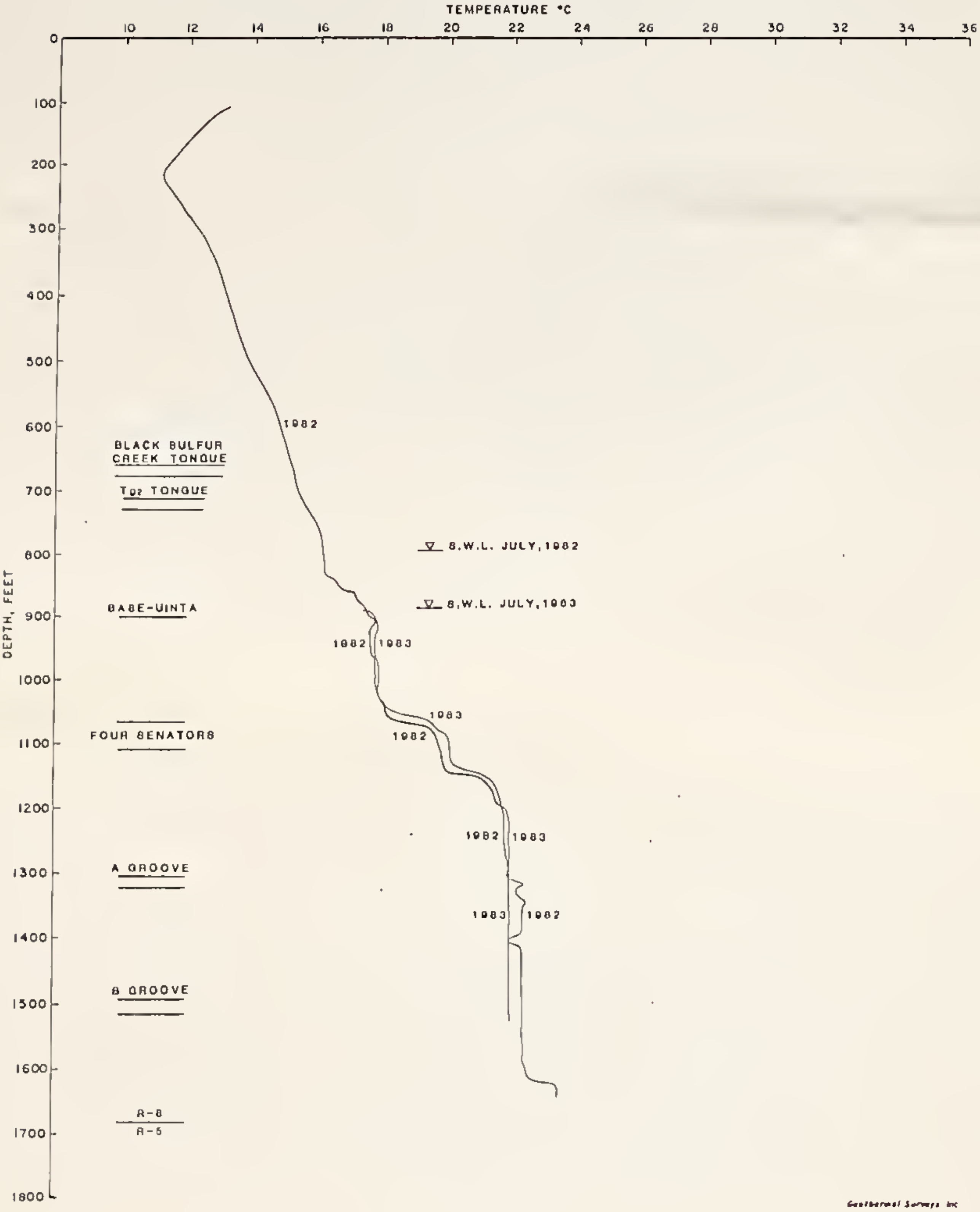
APPENDIX

FIGURE 1

Location Map, Wells with Downhole
Temperature Logs Tract C-b
Rio Blanco County, Colorado

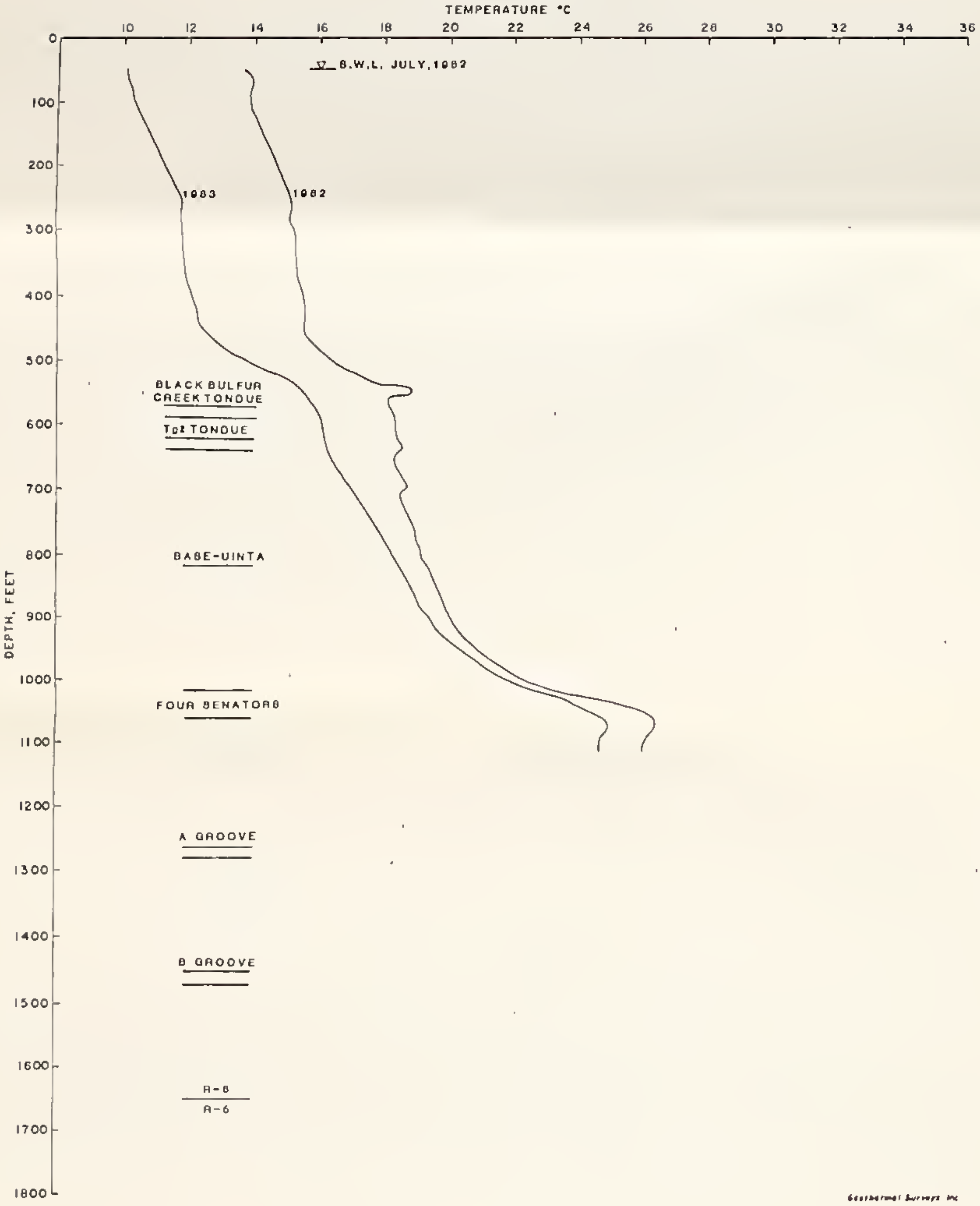

SG19
SG20
SG1
33X1
V/E SHAFT
Cb2
Cb3
21X12
32X12
S/P SHAFTS
SG6
AT 1D
14X7
SG9
SG11
SG10A
REINJECTION WELL
22X17
24X17
N
0
1
2 miles

TEMPERATURE LOG
WELL 32X12
EL. 6826 FT
TRACT C-B
RIO BLANCO COUNTY, COLORADO



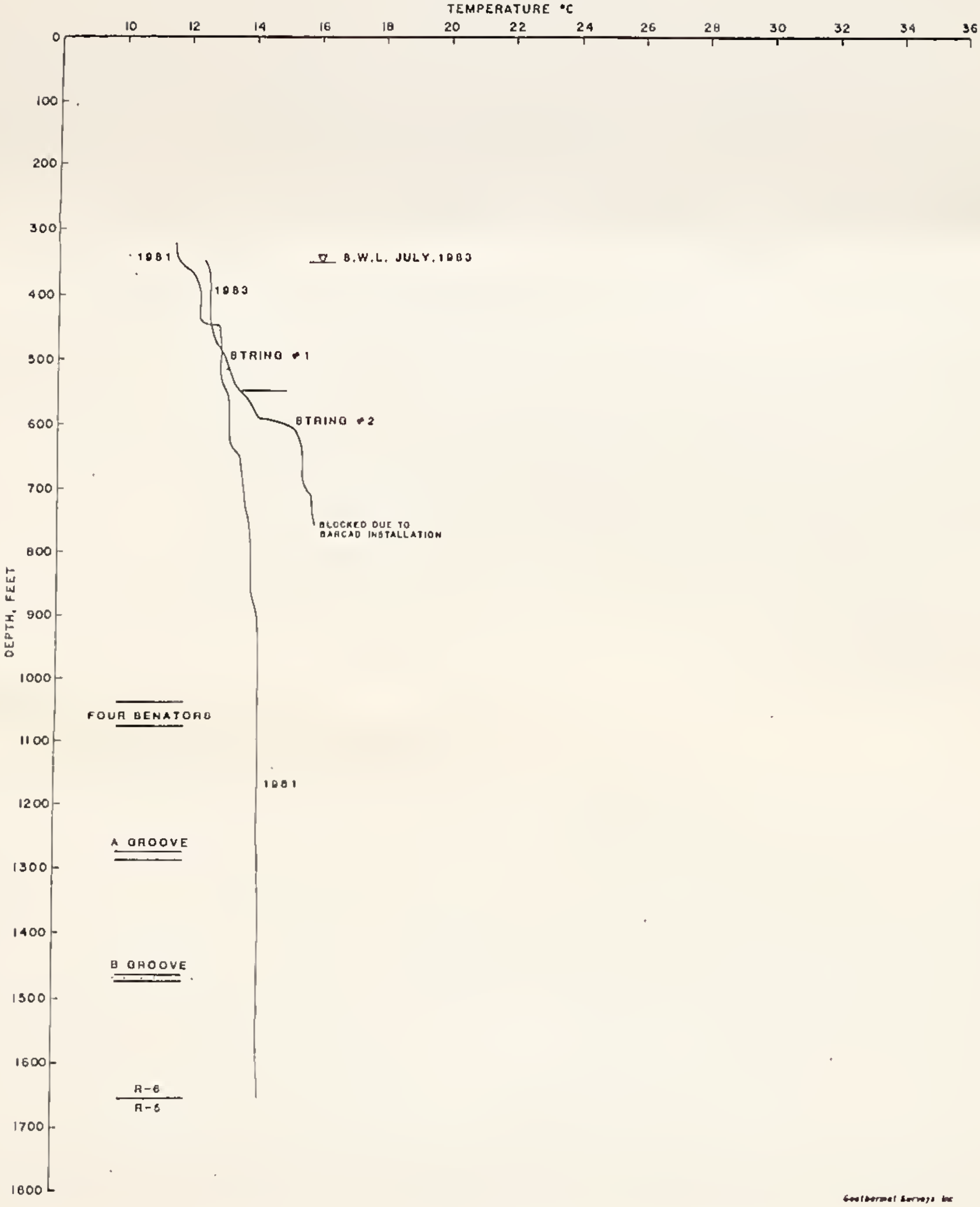
Geothermal Surveys Inc

TEMPERATURE LOG
WELL 33X1
EL. 6703 FT
TRACT C-B
RIO BLANCO COUNTY, COLORADO



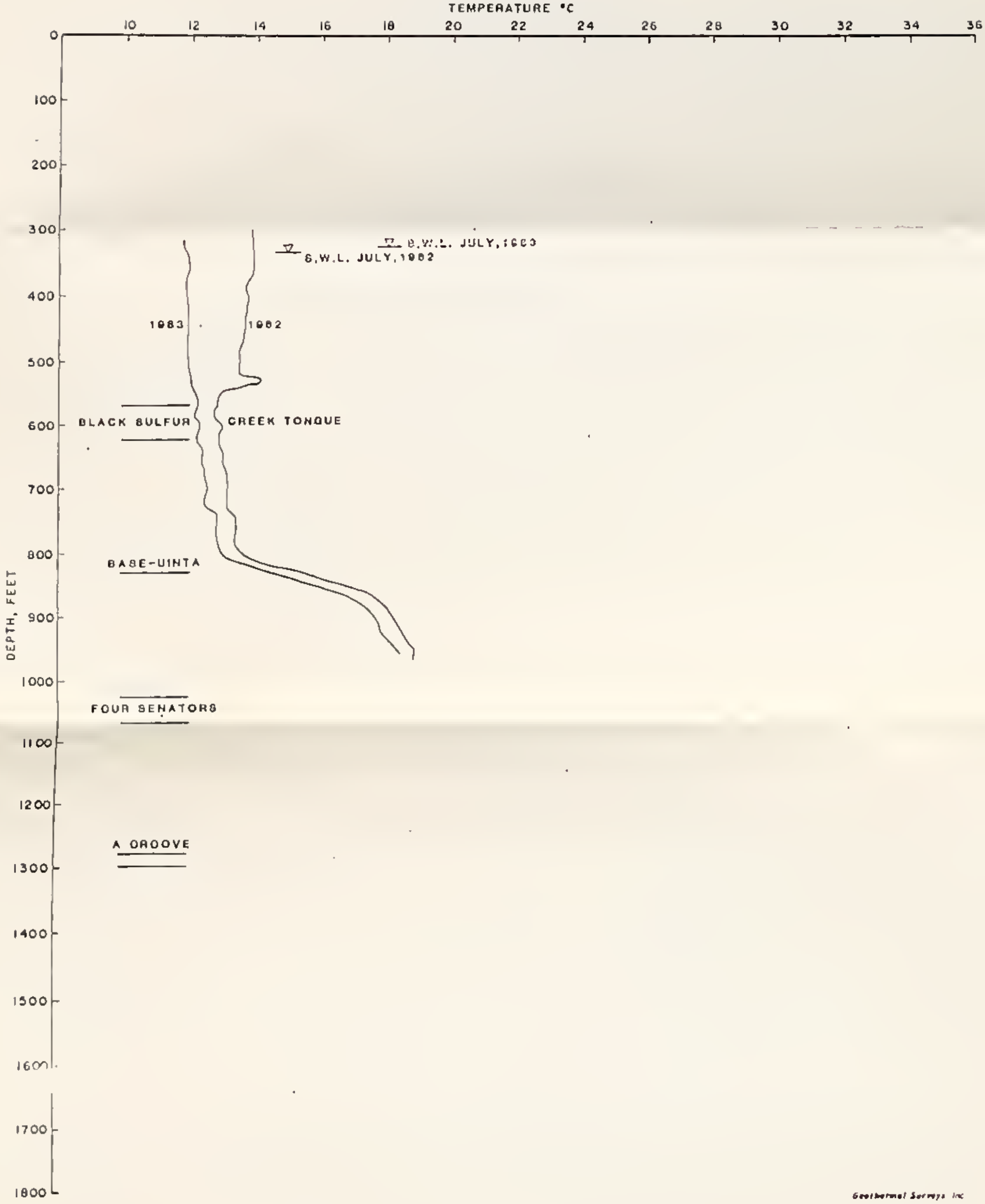
Geothermal Surveys Inc

TEMPERATURE LOG
WELL 21X12
EL.6796
TRACT C-B
RIO BLANCO COUNTY, COLORADO



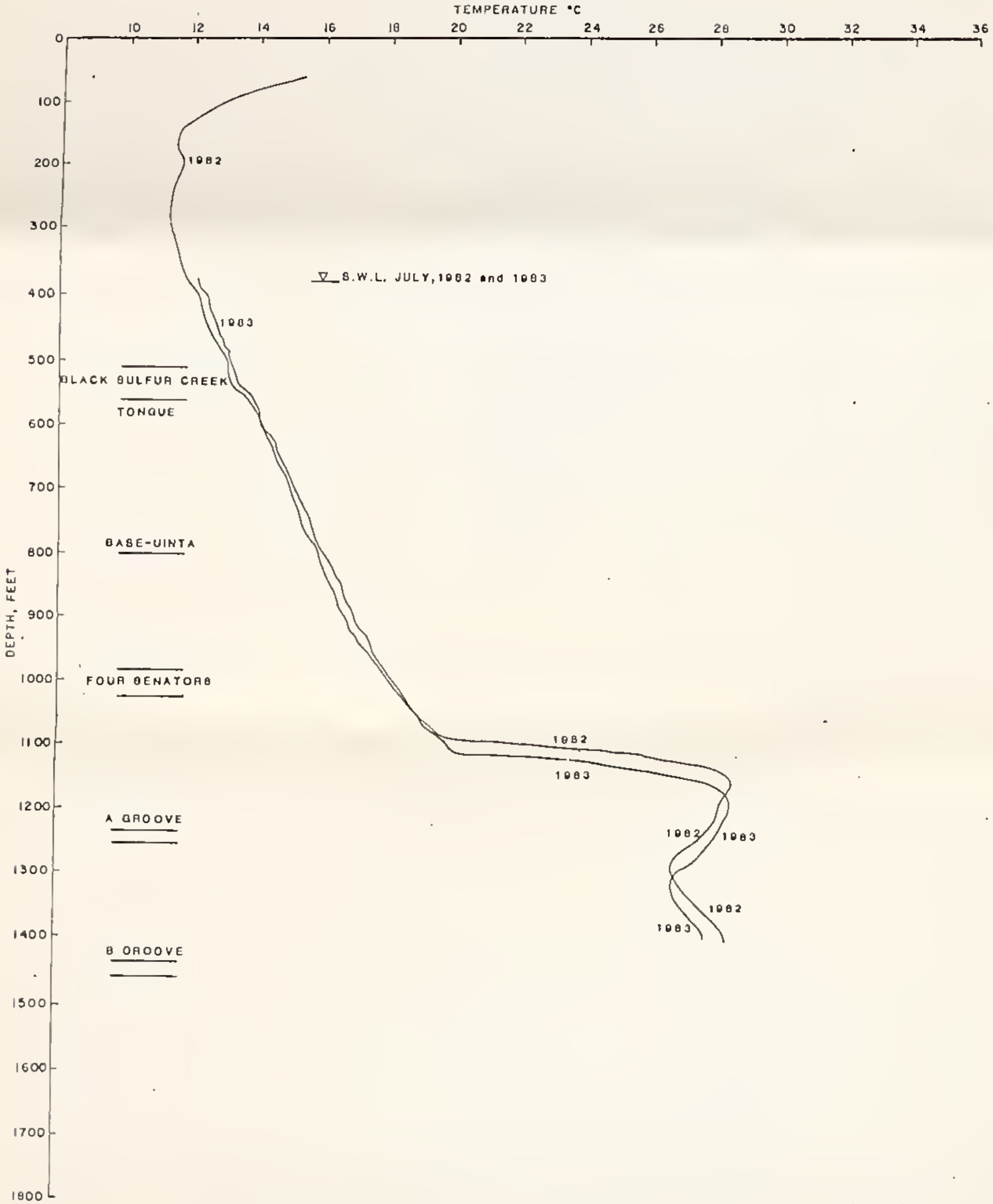
Geothermal Surveys Inc

TEMPERATURE LOG
WELL Cb2
EL.6737FT
TRACT C-B
RIO BLANCO COUNTY, COLORADO



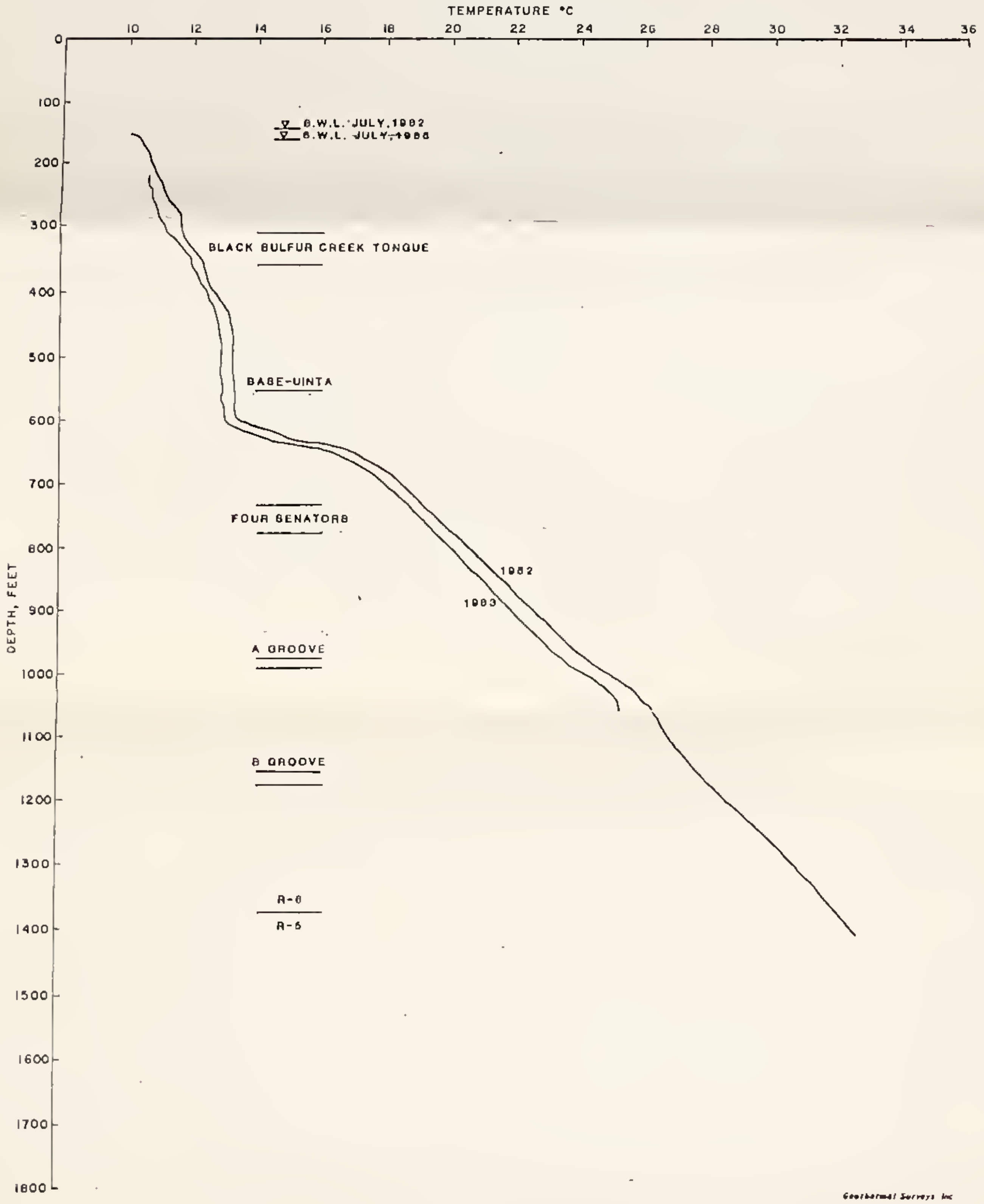
Geothermal Surveys Inc

TEMPERATURE LOG
WELL Cb3
EL 6743 FT
TRACT C-B
RIO BLANCO COUNTY, COLORADO



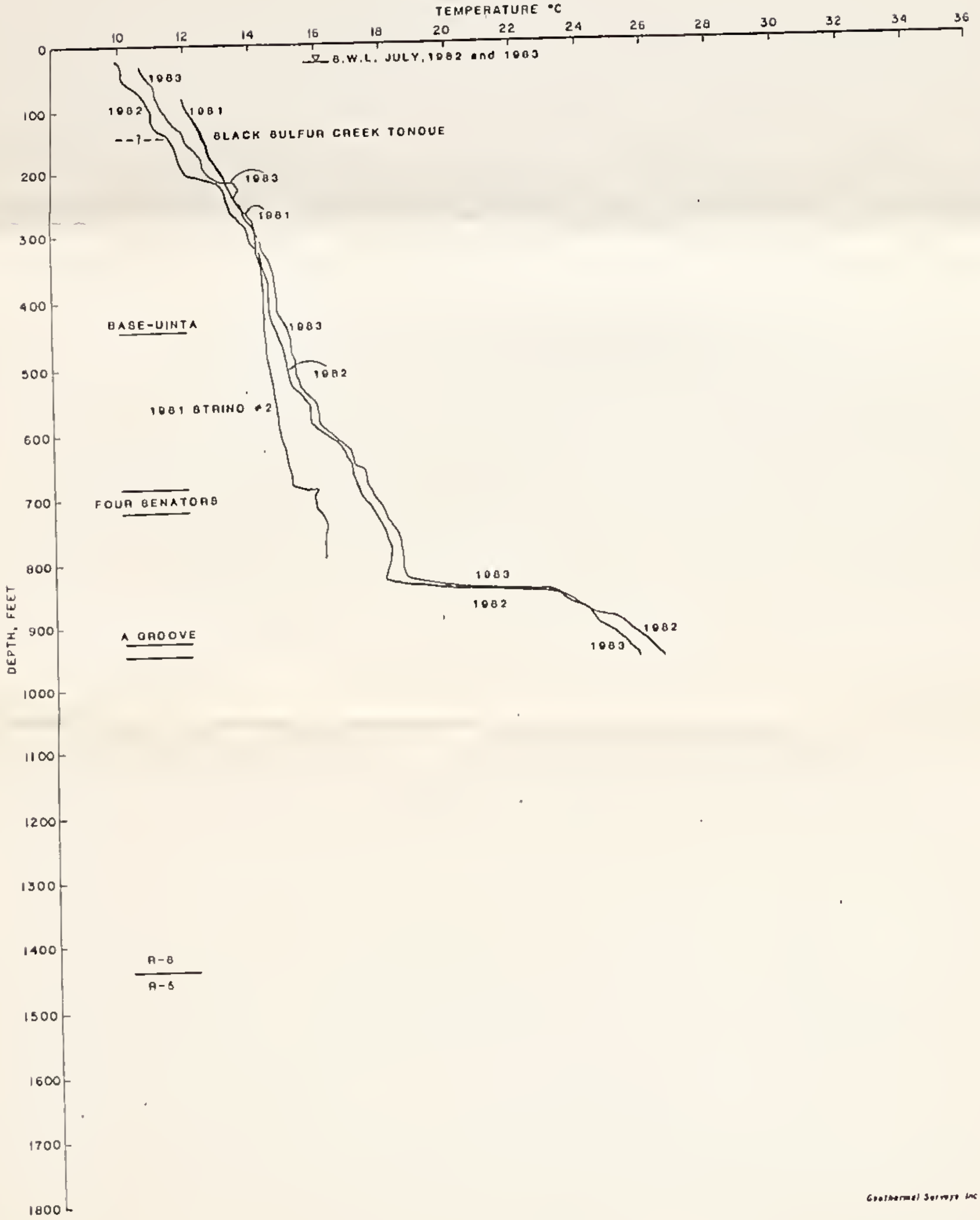
Geothermal Surveys Inc

TEMPERATURE LOG
WELL 801
EL. 6428 FT
TRACT C-B
RIO BLANCO COUNTY, COLORADO



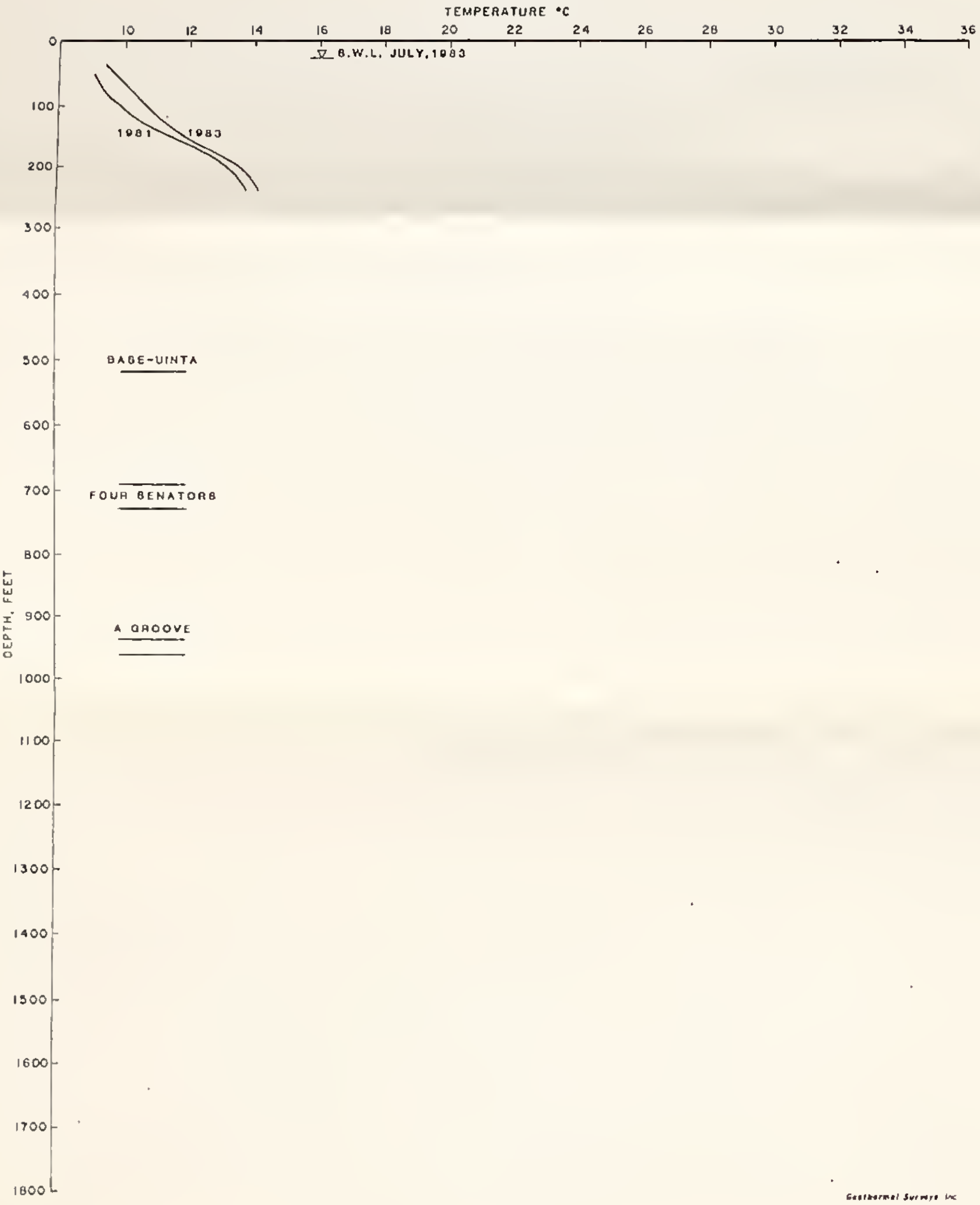
Geothermal Surveys Inc

TEMPERATURE LOG
WELL SG20
EL. 6358 FT
TRACT C-B
RIO BLANCO COUNTY, COLORADO



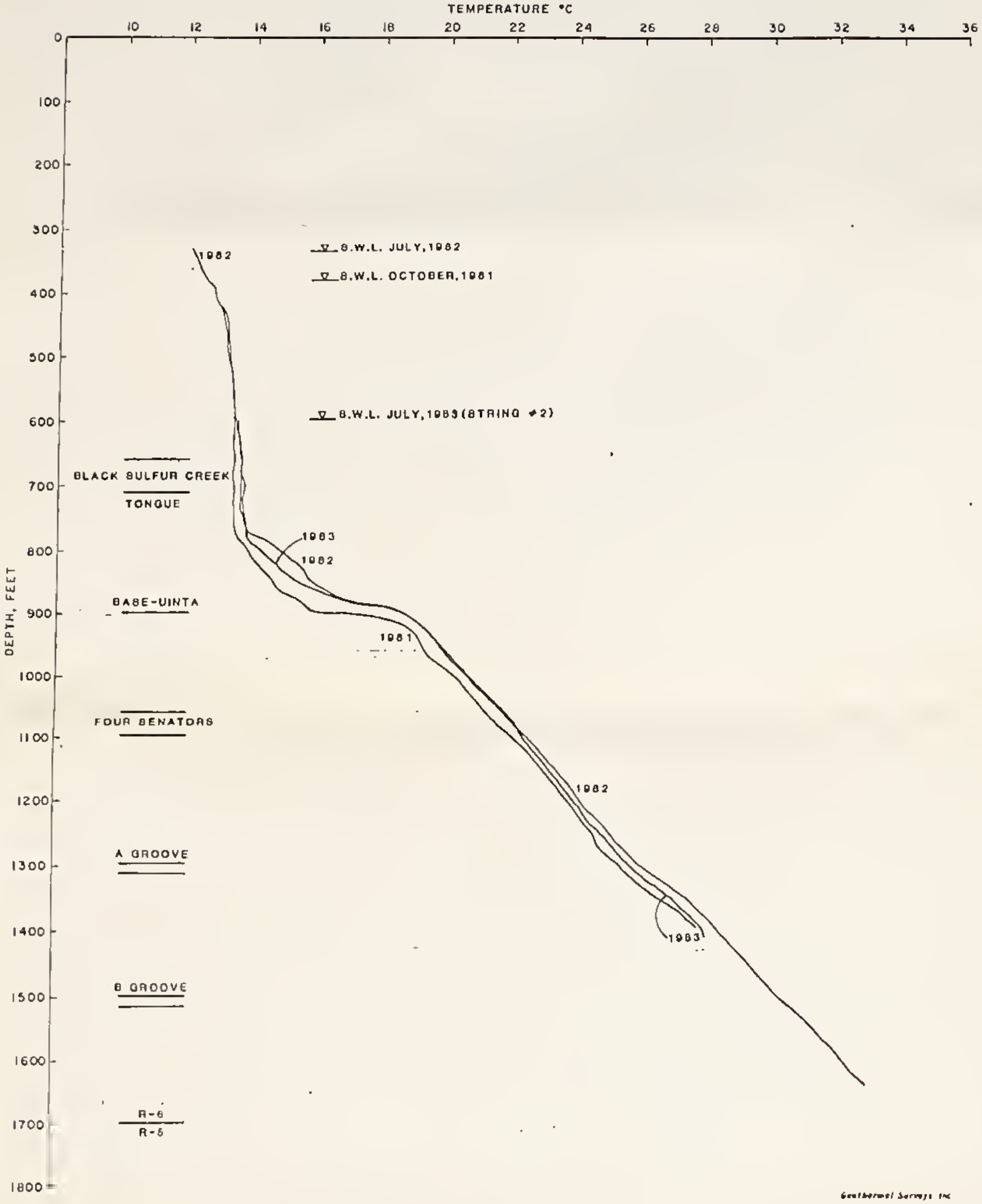
Geothermal Surveys Inc

TEMPERATURE LOG
WELL SG19
EL. 6370 FT
TRACT C-B
RIO BLANCO COUNTY, COLORADO



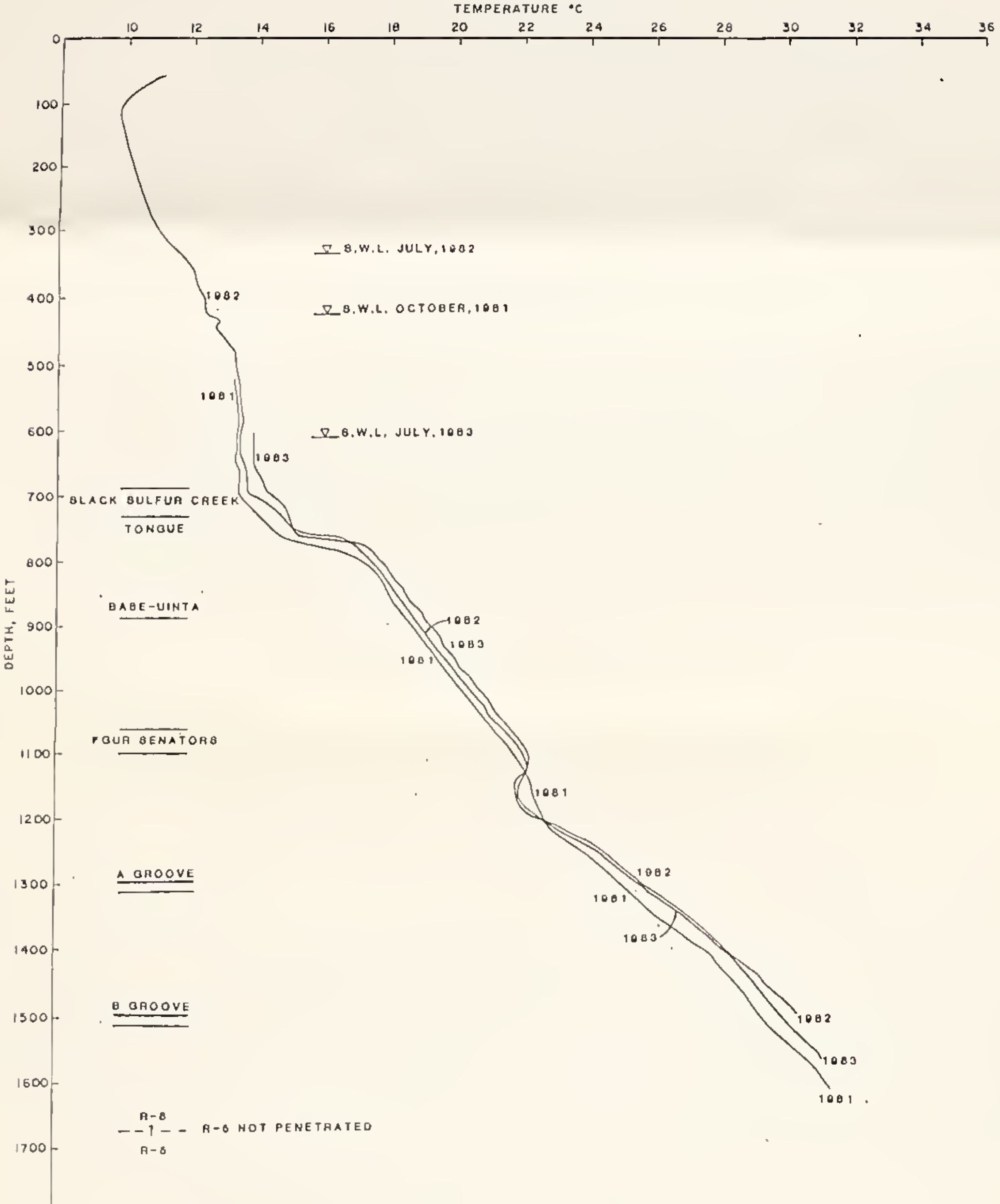
Geothermal Surveys Inc

TEMPERATURE LOG
WELL SG6
EL.6888 FT
TRACT C-B
RIO BLANCO COUNTY, COLORADO



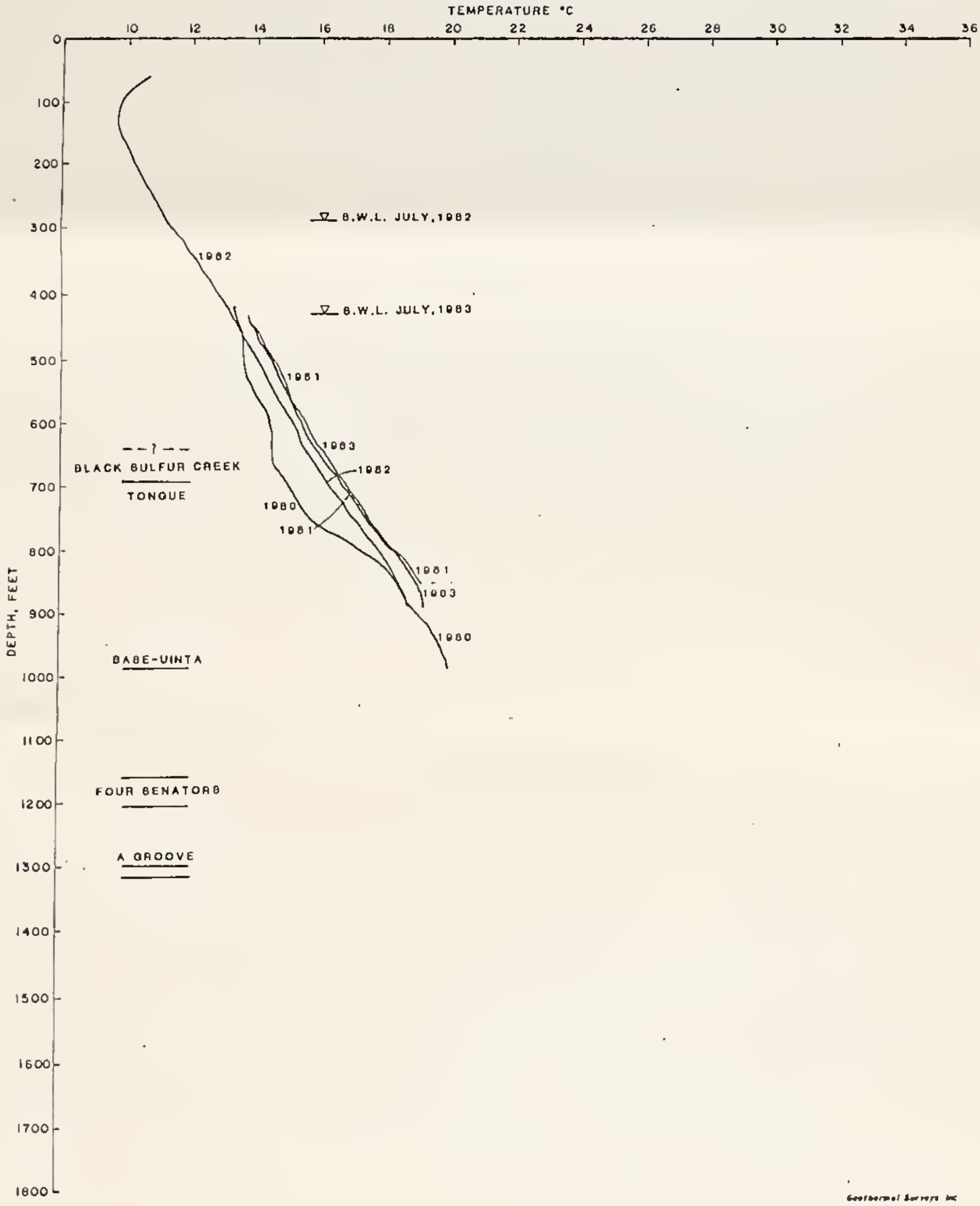
Geothermal Surveys Inc

TEMPERATURE LOG
WELL ATIO
EL.6909 FT
TRACT C-B
RIG BLANCO COUNTY, COLORADO



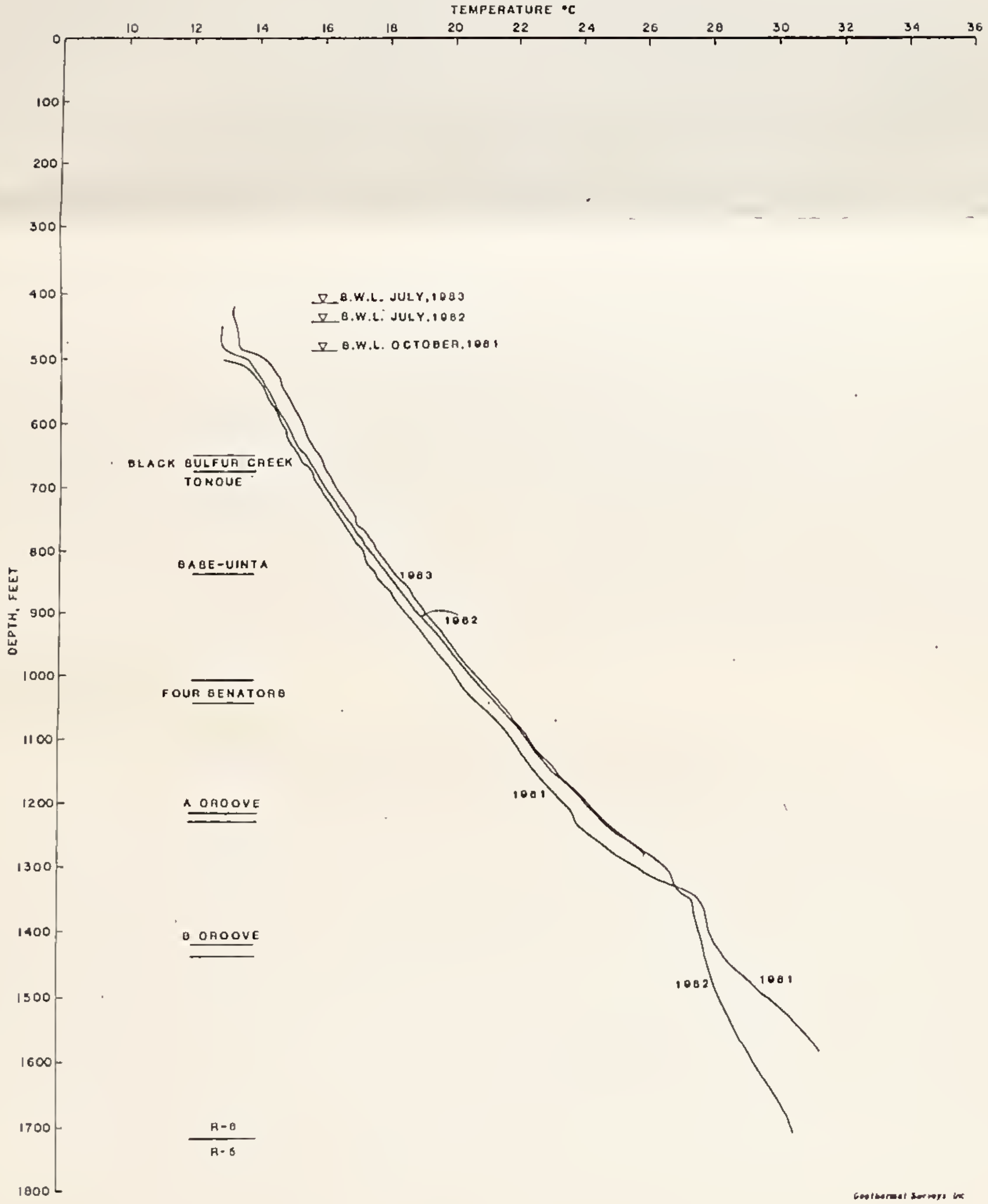
Geothermal Surveys Inc

TEMPERATURE LOG
WELL 14X7
EL. 6914 FT
TRACT C-B
RIO BLANCO COUNTY, COLORADO



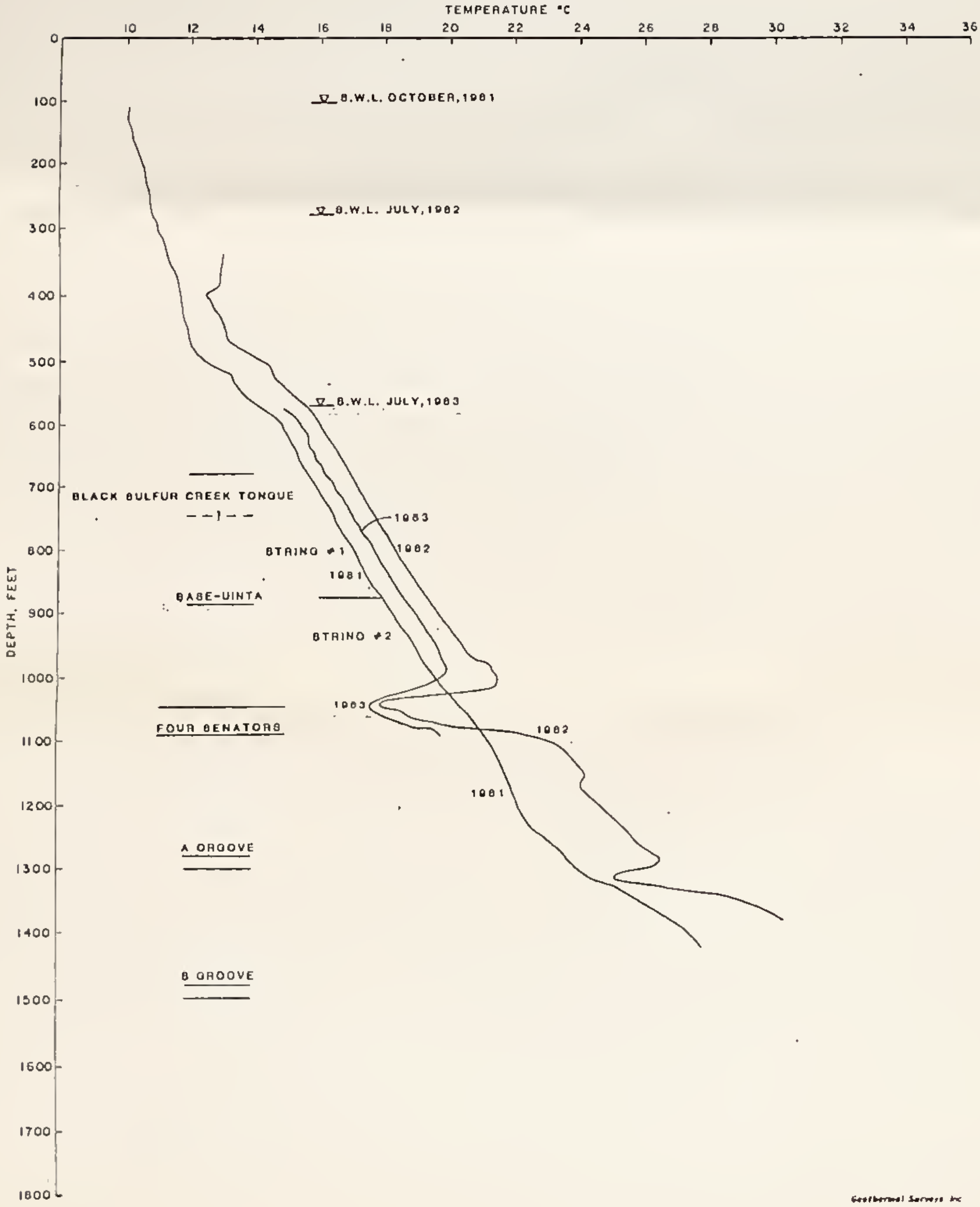
Geothermal Surveys Inc

TEMPERATURE LOG
WELL SG9
EL. 6870 FT
TRACT C-B
RIO BLANCO COUNTY, COLORADO

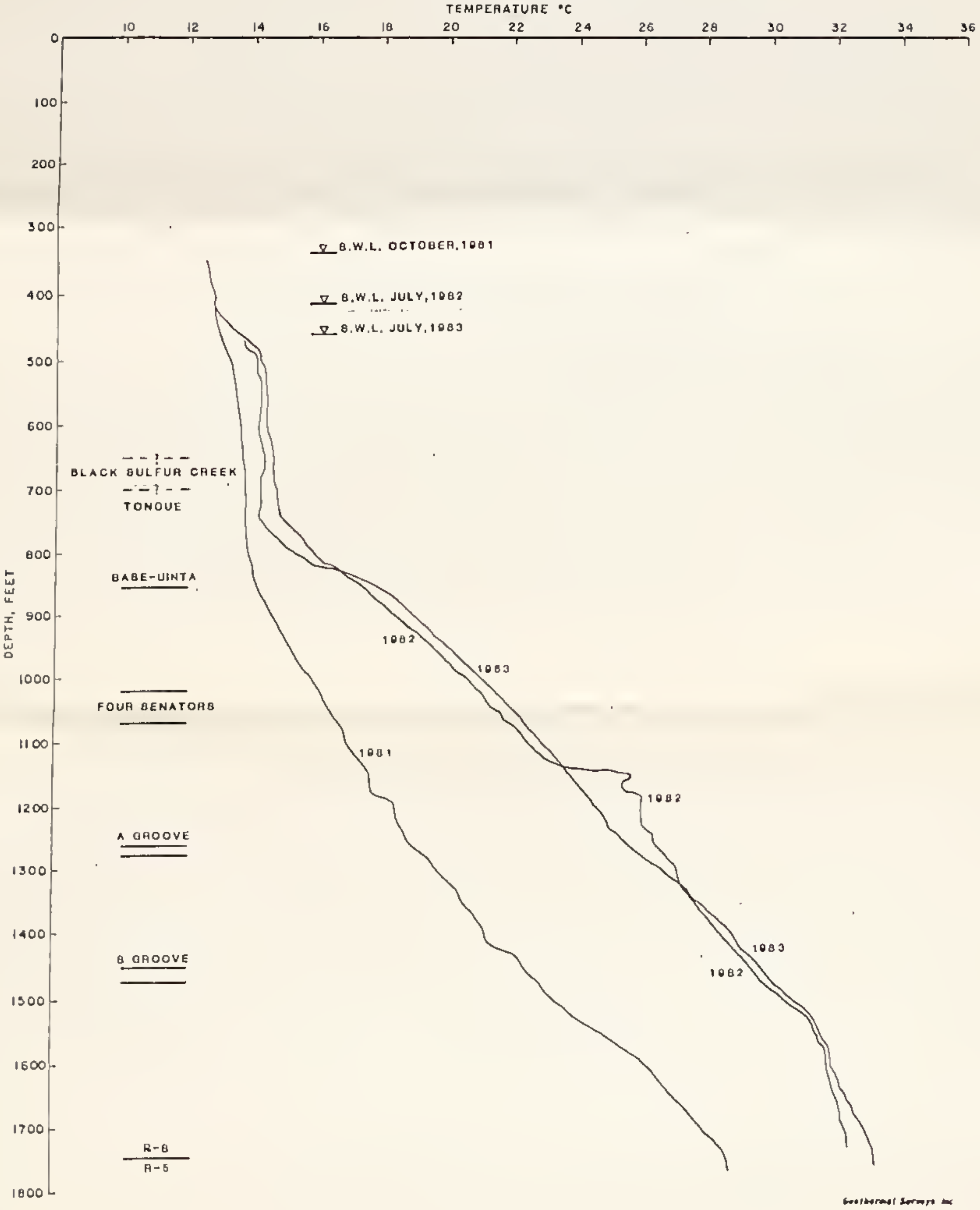


Geothermal Surveys Inc

TEMPERATURE LOG
WELL SG10A
EL. 6945 FT
TRACT C-B
RIO BLANCO COUNTY, COLORADO

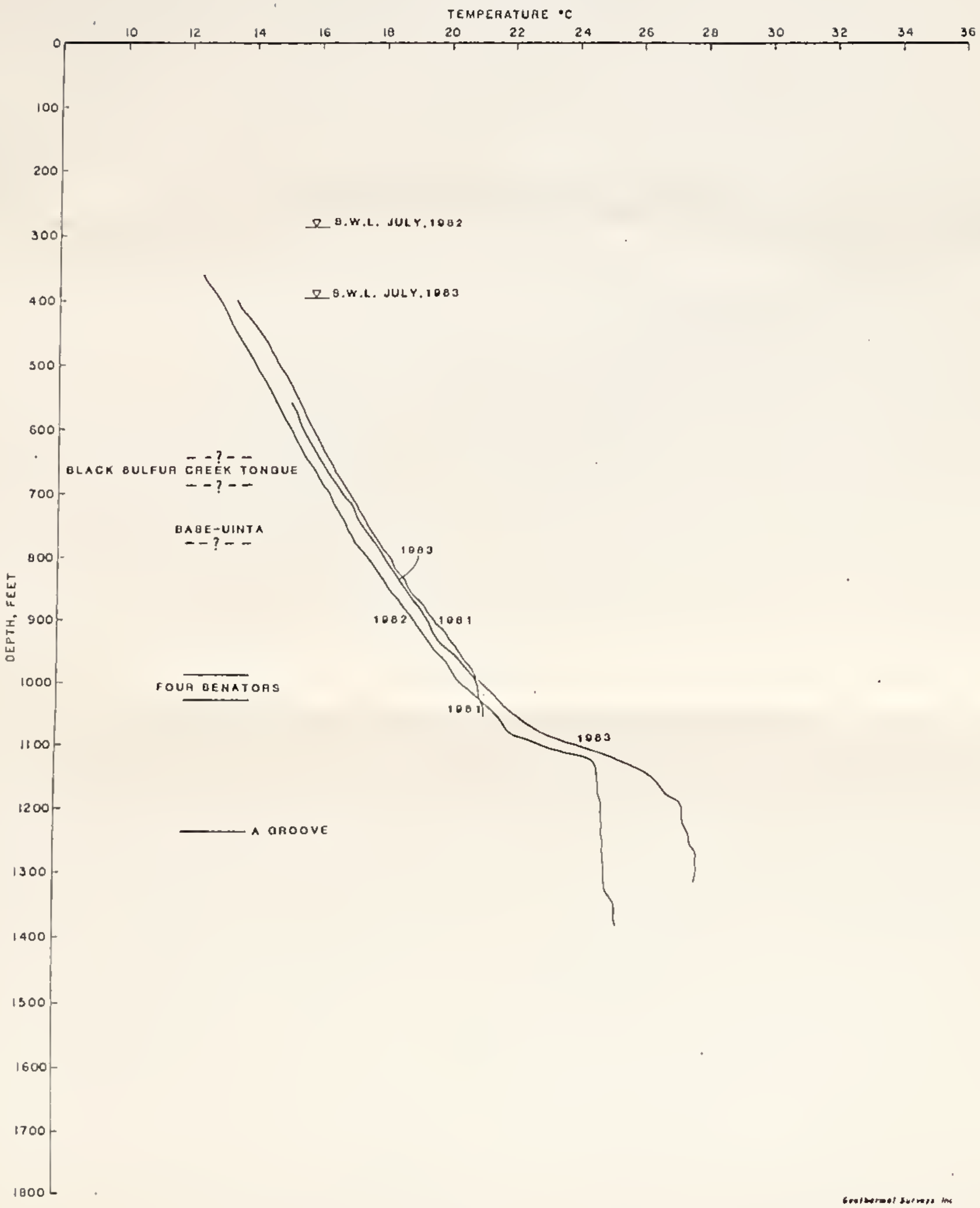


TEMPERATURE LOG
WELL SG11
EL.6900FT
TRACT C-B
RIO BLANCO COUNTY, COLORADO



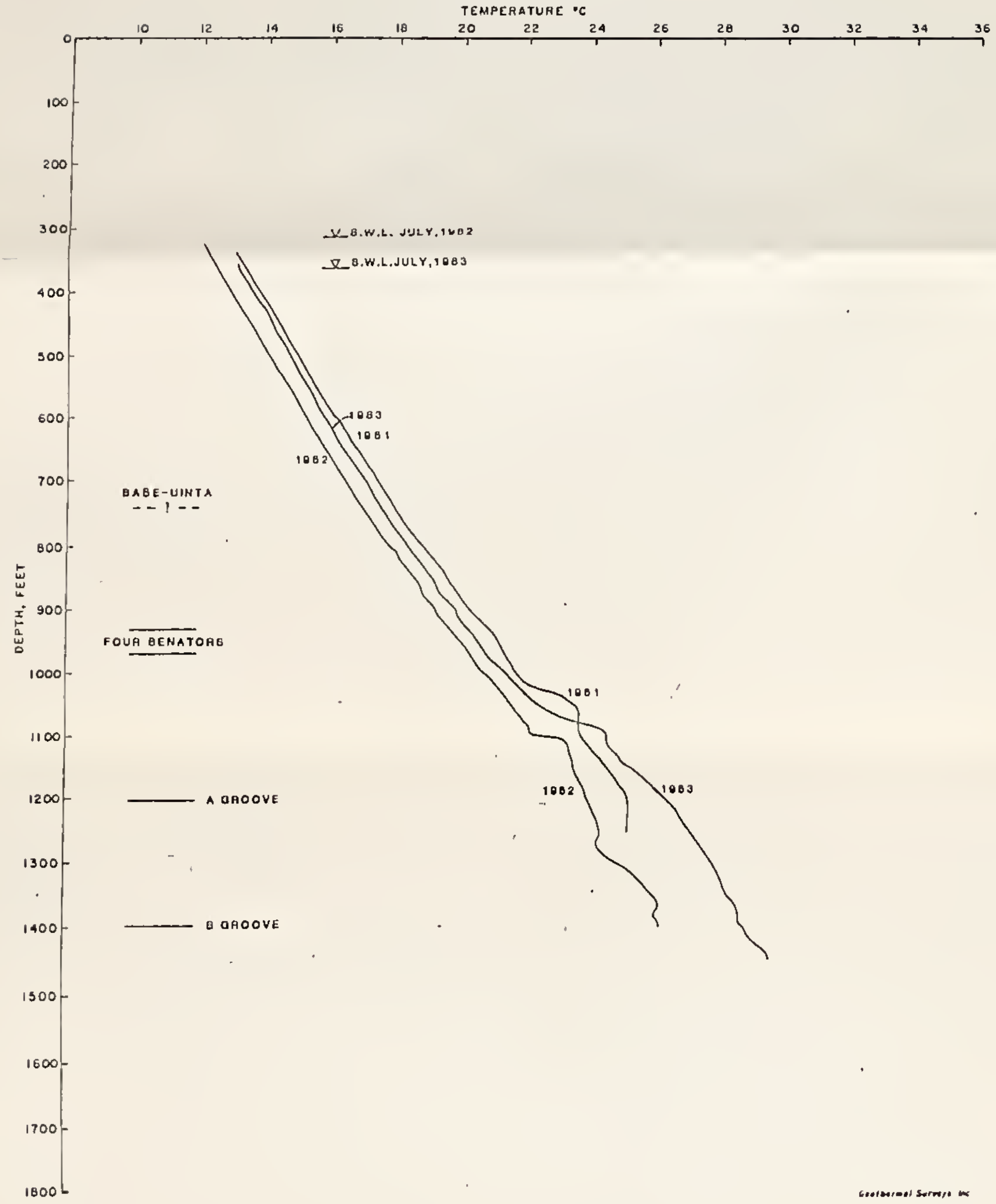
Geothermal Surveys Inc

TEMPERATURE LOG
WELL 22X17
EL.6939 FT
TRACT C-B
RIO BLANCO COUNTY, COLORADO



Geothermal Surveys Inc

TEMPERATURE LOG
WELL 24X17
EL.6992 FT
TRACT C-B
RIO BLANCO COUNTY, COLORADO



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